WORLD BOOK

Research Guide Index • 22

The World Book Encyclopedia

Research Guide/Index Volume 22

The World Book Encyclopedia

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About this volume

This volume consists of two basic parts:

A comprehensive index to *World Book*

An instructional section, A Student Guide to Better Writing, Speaking, and Research Skills

The index includes more than 150,000 entries that direct you to information in *World Book*. The index, together with *World Book*'s extensive system of cross-references, its single alphabetical arrangement, and its other ease-of-use features, helps you find what you want to know quickly and easily. For general instructions on how to find a fact or an article in *World Book*, see the section "How to use *World Book*" in Volume A. To learn how to use the Index, see page 2 of this volume. The index itself begins on page 39.

The section "A Student Guide to Better Writing, Speaking, and Research Skills" begins on page 4. It includes practical advice on such topics as improving your writing skills and preparing a short report, a book review, and a term paper; preparing, rehearsing, and delivering a speech; and using a library's resources and tapping other sources of information. Related information on conducting research follows on page 35. Included are a *Glossary* of terms and abbreviations encountered in research; a listing of general and specific *Selected reference books;* and information on two systems for arranging materials in a library—*Dewey Decimal Classification* and *Library of Congress Classification*.

This volume was prepared with the advice of the *World Book* Advisory Board, other leading educators, practicing teachers, and skilled librarians.

How to use the index

The index is designed to help you find information in *World Book.* It tells you what articles have information on the subject you are looking up. To make it even easier for you to find what you seek, the index refers you to the specific volume and page where the information appears. If it sends you to a fairly long article, it tells you which section or sections of that article to look for.

The references to *World Book* appear under *index headings* that are printed in heavy type. These headings are arranged in alphabetical order. To find where *World Book* contains information on your subject, simply look for an index heading that seems to match the subject you are seeking. For example, if you are looking for information on employment, look for the index heading

Employment

and you have found the references you want.

If the index heading you find is also the title of an article in *World Book,* the volume and page number are shown immediately after the heading. In the case of

Mythology M: 973

the index heading and article title are the same, and the article begins on page 973 of the M volume. Page numbers in the two C volumes are indicated with *C* and *Ci,* and those in the two S volumes are indicated with *S* and *So.* Page numbers for the volumes that contain more than one letter indicate the letter you seek, rather than the first letter of the volume. For example, the reference to "Yankee Doodle" sends you to Y: 554, page 554 of the W-X-Y-Z volume.

If the heading you find is not the title of an article, you will find the titles of *World Book* articles listed as *index entries* in light type under the heading:

Microbe
Microbiology **M: 513**

If the article referred to is divided into sections, you will find the appropriate subheadings in parentheses between the article title and the page number, pinpointing the place where the information may be found:

Aksum [ancient country] **A: 255** *with map*
Africa (The influence of Christianity) **A: 131**
Eritrea (History) **E: 353**

Sometimes you will find two page numbers after a title and subheading. They indicate that the section referred to covers more than one page and begins on the first page listed, but the information you seek appears on the second:

World Trade Center
New York City (Manhattan) **N: 323-324**

The index entries listed under an index heading normally appear in alphabetical order. But if one entry is much more important as a source of the information you seek, it appears first:

Flavor
Taste **T: 50**
Spice **So: 781**

Some headings have only a few entries under them. Others, such as the Africa heading, have many. In many long lists, you will find the entries divided into smaller groups under such subjects as Agriculture, Art and architecture, and Education.

Identifiers, words or phrases in brackets, indicate which of several similar headings is the one you seek:

Core [botany]
Core [electromagnetism]
Core [geology]
Core [nuclear reactor]
CORE [organization]
Core [sun]

Some identifiers are not complete in themselves, but the article titles that follow them complete the identification.

Lincoln, William Wallace [son of]
Lincoln, Abraham (Lincoln's family) **L: 315**

Cross-references guide you in using the index. A *see* reference means that the information you seek appears under another heading, rather than the one you have chosen:

Feisal
See Faisal *in this index*

A *see also* reference indicates that another heading in the index has entries you may want to look up.

Accident
See also First aid *in this index*

Many cross-references send you to lists of Related articles:

See also the list of Related articles in the American literature *article*

You can thus find the long lists of articles in *World Book,* such as this list of American authors, but these lists do not take up space in the index.

References to illustrations appear along with other references in this index, not separately. The wording shows whether you will find both pictures and text information or only pictures on the pages listed. If the entry says *with picture, with portrait, with diagram, with map,* or a similar phrase, it indicates that text material appears on the page named and that a related illustration appears on the same page or the page facing it. In the case of

Brake [mechanics]
Automobile (The brake system) **A: 954** *with diagram*

the text information appears on A: 954 and is accompanied by a diagram showing a brake system.

If the entry says *picture on, diagram on,* or *map on* a given page, it indicates that the illustration listed is related to the subject of the index heading you found, even though no significant text information on that subject appears on the same page. In the case of

Revere, Paul
Boston Massacre *picture on* **B: 505**

the picture illustrates Revere's handiwork but the Boston Massacre article does not go into detail about Revere.

The order of headings in this index is alphabetical, with the items arranged word by word, not letter by letter, just as they are in *World Book*:

Consumer Price Index
Consumerism
Consumers League, National

Letters are usually regarded as separate words unless they normally form parts of a larger word or an acronym:

E [letter]
E Pluribus Unum
Eakins, Thomas
EAM [organization]

Numbers at the beginnings of headings are treated as though they were spelled out, even when they appear as figures:

Fifth Republic
50° summer isotherm
Fifty-Four Forty or Fight

A Student Guide to Better

Writing, Speaking, and Research Skills

Do you panic when faced with a writing assignment? Are you nervous about getting up to speak before a group? Do you sometimes find it difficult to find the right research materials? You're not alone. Many students have the same problems. That's why we developed this section—to help you improve your skills in these important areas.

A Student Guide to Better Writing, Speaking, and Research Skills consists of three parts. Part one, A Guide to Writing Skills, includes practical tips to help you become a better writer. It also provides how-to-advice on preparing a short report and on preparing a book report. In addition, it takes you through the various steps involved in preparing a research paper: from making a schedule and choosing a topic, through background reading and making an outline, to writing a first draft, making the final copy, and preparing footnotes and a list of sources.

Part two, A Guide to Speaking Skills, covers the six basic steps in preparing a speech. It also provides useful information on the different kinds of speeches and easy-to-follow tips on rehearsing and delivering a speech. The section concludes with helpful hints on the effective use of audio-visual aids.

A Guide to Research Skills, part three, helps you get the most of the resources from the library or media center. It includes detailed information about library catalog systems and reference sources. It tells how to evaluate reference sources and how to prepare source cards and take notes. The

section provides guidance for tapping sources of information outside of the library, such as conducting an interview or using television or the Internet as a source.

A Student Guide to Better Writing, Speaking, and Research Skills concludes with a Glossary of terms and abbreviations often encountered in research; a list of general and specific Selected Reference Materials; and information on two library classification systems—Dewey Decimal Classification and Library of Congress Classification.

Contents

The illustrations in the feature were prepared for WORLD BOOK by Mike Eagle, Kirchoff-Wohlberg, Inc..

A Guide to

WRITING SKILLS

Learning to be a good writer is a goal worth striving for. Schoolwork involves a steady stream of writing assignments, and many jobs require the writing of effective letters, memos, and reports. Writing also plays a role in your personal life, as you fill out forms or write letters to friends and relatives.

Good writing gets its message across so clearly that the reader knows exactly what the writer meant to say. It also holds the reader's attention so completely that the entire message—not just a fragment of it—is received.

Don't believe anyone who tells you that it's easy to write well. It isn't. People who have no trouble expressing themselves out loud may freeze when they pick up a pencil. Like any other skill—for example, shooting baskets or playing the piano—writing requires practice. The more you do it, the better you become.

The following sections contain information that can help you improve your writing skills in general. They also provide specific guidelines for preparing such school assignments as short reports, book reports, and research papers.

Writing Tips

Practice helps. If practicing writing sounds like drudgery, you probably haven't thought of all the possibilities. Your practice writing doesn't have to be perfect. It should simply get you into the habit of using written words to express yourself.

You can get into the writing habit in many ways. Keep a journal or diary to record your experiences, thoughts, and feelings. Write letters or e-mails to

friends, relatives, or a pen pal. Try writing a fan letter to your favorite author, TV personality, or rock star. And don't forget to send post cards when you travel. Send for brochures, pamphlets, and free samples that you see advertised in newspapers or magazines. You might also consider writing your own invitations and greeting cards instead of buying commercially produced ones.

The more you write for fun, the more you'll realize that writing doesn't have to be a chore. Every time you write, you'll be practicing a skill and getting better at it.

Preliminary steps for success. Some of your school writing assignments, such as themes, essays, and stories, are based on your own opinions, ideas, or imagination. Other writing assignments, such as book reports and research papers, are based on facts gained from reading and research. Whatever the assignment may be, your work will proceed more smoothly if you follow these suggestions before you begin putting words on paper:

1. Be sure you understand the specifics of the assignment, such as its length and whether the topic is your choice or assigned.

2. Plan ahead and organize your time to help assure that you have enough time to do a good job.

3. If the topic is your choice, select one that interests you, one that you already know something about, or one that you're eager to learn more about. Limit your topic so that you can cover it adequately in the assigned length and the available time.

4. Jot down ideas whenever and wherever they occur to you. Simply talking about your assignment with friends can trigger ideas that you might be able to use in your paper.

5. Develop an outline to organize your thoughts and to guide your writing so you won't forget a point you intended to include. A simple list of the main ideas may be adequate for a short assignment. Major assignments may require a more formal outline.

The three-part plan. Many writing projects can be organized into three parts: (1) the introduction, (2) the body, and (3) the conclusion. In the introduction, you briefly introduce your topic, giving the reader a preview of what's to come. The body of the paper—the longest part by far—provides the facts, examples, and details that support the main idea expressed in the introduction. The conclusion summarizes and restates the main idea.

The three parts of your paper should work together to make an effective whole. Strive for an attention-getting introduction—one that will arouse interest and encourage your reader to read on. In the body, make sure each point relates to the subject you're discussing. Don't stray into unrelated material or get caught up in trivial details that don't support your main idea. Your conclusion is your last chance to impress the reader. Don't end on a weak note. Try to make your conclusion as strong and effective as you can.

As you get ready to start writing, think of the three parts of your paper in terms of this simple formula.

1. Tell the reader what you're going to say.

2. Say it.

3. Tell the reader what you said.

Writing the first draft. When the time comes for you to write a first draft, don't sit with pencil poised waiting for the perfect sentence to come to mind. It's better to plunge right in, without worrying about making mistakes in grammar, spelling, and punctuation. At this stage, you simply need to put down the information and ideas you've gathered. Don't feel you have to use complete sentences. You can go back later to change and improve your work. And don't feel you have to begin with the introduction, especially if you're having difficulty with it. In many cases, you'll think of an effective introduction after you've written the body of your paper.

Always write or type your first draft on one side of the paper only, with wide margins to allow plenty of room for revisions. If you write the draft, use every other line of the paper. If you type, set your computer, word processor, or typewriter for double- or triple-spacing.

"Like any other skill... writing requires practice. The more you do it, the better you become."

enclosures

enclosures that resemble sleeping bags. These enable astronauts

without being **down to keep from**

to sleep ~~un~~strapped ~~without~~ floating **about.**

also requires

<u>Eating and drinking</u>. Eating aboard the space shuttle

astronauts to **They**

~~involves~~ adjust~~ing~~ to the conditions of weightlessness. ~~Astronauts~~

eat their meals with their feet strapped down ~~to keep~~

Their

~~them from floating about~~. ~~F~~ood must be nutritious, easy to eat,

to

and convenient ~~so~~ store. Foods include frozen or chilled

facilities for heating

soups, vegetables, and meats. The shuttle has ~~ways to heat~~ food.

use

The astronauts ~~eat with~~ dishes and silverware.

"Editing your own work is one of the... most important tasks in turning out a well-written paper... Look for weak spots in content, organization, and writing style as well as errors in grammar, capitalization and punctuation."

Revising your work. Think of writing as a building process, with words, sentences, and paragraphs as building blocks. Your goal is to choose the best words, to put them together into clear, grammatical sentences, to form the sentences into logical, coherent paragraphs, and to link the paragraphs into a well-organized paper.

Don't expect to reach your goal the first time around. In most cases, writing involves a lot of rewriting—turning out as many drafts as necessary to produce the best results.

After you've completed your first draft, the best thing to do is forget about your paper for a while. Leave it alone for an hour, a day, or several days if time permits. Then look at it again with a fresh, critical eye.

Begin your revision by reading your work carefully. You might be so impressed or satisfied with your first effort that you think it can't be improved. But chances are it can be. Editing your own work is one of the hardest and most important tasks in turning out a well-written paper. Reading your work aloud will help you catch parts that need revision. Parts that sound unnatural or don't make sense require reworking. Also look for weak spots in content, organization, and writing style, as well as for errors in grammar, spelling, capitalization, and punctuation. Keep a dictionary, thesaurus, and grammar handbook nearby—and be sure to use them. If you are working on a word processor, use such built-in aids as the dictionary.

Use a colored pencil and make your corrections right on the paper. If you're adding one or more sentences, write them in the margin and use an arrow to show where the additions should go. If you want to take out material, don't erase it or black it out completely. Instead, draw a neat line through the material or draw a circle around it. That way, if you later decide to restore the material or move it somewhere else, it will still be readable. If you are using a word processor, save the revised file under a name different from the original.

Judging the content. To judge the content of your paper, keep in mind your reader and your purpose. Ask yourself these questions: Is the introduction as effective as I can make it? Will it arouse the reader's interest? Does the body of the paper include all the points I wanted to cover? Will the reader understand what I'm trying to say? Are there enough examples or details to support my main idea? Are there gaps that need to be filled? Are there parts that don't really fit and so should be eliminated? Does my conclusion leave a strong impression?

Checking the organization. Be sure each paragraph has a *topic sentence.* A topic sentence expresses the central idea of the paragraph. All other sentences in the paragraph should relate to the topic sentence. If you have a sentence that doesn't seem to fit in the paragraph, move it to another

paragraph or eliminate it. Don't make it a paragraph by itself. Every paragraph should consist of at least two sentences. Make sure your paragraphs flow smoothly from one to the next in logical order.

Style pointers. Style—the way you express yourself—can make a big difference in the effectiveness of your writing. A paper that has all the necessary information but is boring to read may leave the reader disappointed and unimpressed. To make your writing as interesting and effective as it can be, keep in mind these points:

1. Use specific, vivid words, including action verbs. If you're writing a report on the Pueblo Indians, for example, tell how the Indians *dug* irrigation ditches, *wove* cloth, and *carved* dolls, not how they *made* ditches, cloth, and dolls.

2. Vary your sentence structure. Don't write a paper that consists entirely of short, simple sentences. Avoid beginning too many sentences with the same word.

3. Use interesting comparisons to bring statistics to life. For example, a figure for the population of India is more interesting if you add the fact that more people live in India than in all the countries of North and South America combined.

4. Avoid wordiness, unnecessary "big words," and overused expressions. Don't use excess words that only take up space. For example, write *today* or *now* rather than *at the present time* and *if* rather than *in the event that.* Don't use words that you yourself don't understand or that are intended merely to impress your reader. For example, write *end* rather than *termination* and *best* rather than *optimum.* Replace overused expressions, called *clichés,* with fresher expressions. *Hungry as a bear, the last straw,* and *last but not least* are examples of clichés.

5. Avoid overly formal writing. Think of writing as a kind of conversation with yourself or a friend. For certain assignments, your writing style may be more formal than your everyday conversation. However, try to make your writing sound natural.

Common grammatical errors. Mistakes in grammar can confuse the reader and even change the meaning of what you write. Here are some of the most common grammatical problems you should look for as you revise your work.

1. *Run-on sentences* consist of two or more independent clauses written together without a proper connection. A comma alone cannot be used to link such clauses.

Example: It stopped raining, we played the rest of the game.

There are several ways to correct the error.

Make two separate sentences:

It stopped raining. We played the rest of the game.

Use a semicolon to link the independent clauses:

It stopped raining; we played the rest of the game.

Use a conjunction, such as *and* or *but,* to link the clauses:

It stopped raining, and we played the rest of the game.

Make one of the clauses a phrase or dependent clause:

After it stopped raining, we played the rest of the game.

2. *Sentence fragments* are incomplete sentences. Phrases and dependent clauses cannot stand alone as sentences. To correct a fragment, you can join it to a sentence or add words to make it a sentence.

Fragment: known for their skill as hunters.

Correction: Known for their skill as hunters, lions have little trouble finding food.

or

Lions are known for their skill as hunters.

3. *Subject-verb agreement.* A subject and verb must agree in number and person.

Number: The *star appears* at dusk. [singular]
The *stars appear* at dusk. [plural]

Person: *I am* careful. [First person singular]
You are careful. [Second person singular]
He, she, it is careful. [Third person singular]
We are careful. [First person plural]
You are careful. [Second person plural]
They are careful. [Third person plural]

4. *Pronoun agreement.* As shown above, a pronoun used as a subject must agree with its verb. A pronoun must also agree with its *antecedent*—that is, the particular noun to which it refers.

Bill rode *his* bike to school.
The women announced *their* decision.

5. *Unclear pronoun references.* Pronouns can cause confusion if their antecedents are not clear.

Confusing: When Karen told Ann the story, she looked surprised.

Clear: When Karen told Ann the story, Ann looked surprised.

or

Ann looked surprised when Karen told her the story.

6. *Dangling modifier* is an element in a sentence that seems to modify a word that it does not logically modify.

Dangling: Running at record-

"A short report demands a narrow topic... Topics that could be... handled in a short report might be 'How White Blood Cells Fight Disease,' 'Tools Used by Colonial Farmers,' or 'Life Aboard the Space Shuttle.'"

breaking speed, the race was the highlight of the day.

Correct: Running at record-breaking speed, Kelly made the race the highlight of the day.

7. *Misplaced modifier* is a phrase or clause not close enough to the word it modifies. As a result, it may seem to modify another word.

Misplaced: Jack ran to his mother *waving the letter*.

Correct: *Waving the letter*, Jack ran to his mother.

8. *Shifts in verb tense*. Generally, you should use one verb tense throughout your paper. If your paper describes past events, you should use the past tense. For many other papers, you will use the present tense. Be consistent in whichever tense you choose.

After you've completed all your revisions, your work should be the best it can be. You're then ready to produce the final copy. The next sections provide specific suggestions on how to prepare a short report, book report, and research paper as well as general guidelines for producing the final copy.

Preparing a Short Report

During a school year, you'll probably be asked to write short reports on various subjects. The typical short report runs from 300 to 500 words and involves gathering information from one or more sources. This research provides you with "raw material"—the information you need for your report. As the writer, your job is to produce a finished product—a report that presents the research information in your own words in a clear, interesting manner.

Before you write. The section *Writing Tips* included a list of preliminary steps to follow before you begin a writing task. Here are some additional suggestions that apply specifically to short reports.

Understanding the assignment. Be sure you know how long the report should be. Your teacher may give you a specific figure, such as 400 words, or a range, such as 300 to 500 words. It probably won't matter if you're a bit over or under the number of words assigned, but stay close to the target.

You need to know if your teacher expects a *summary report* or a *critical report*. In a summary report, you present the informa-

tion you've found without expressing any opinions or judgments. For example, a paper describing the founding of the United Nations could be presented as a summary report. In a critical report, on the other hand, you're expected to present *your own reactions* to the information you've found. You need to evaluate the information, take a stand, and justify your stand with supporting points. In a critical report on the United Nations, you might take a position for or against continued United States membership in the organization.

If your teacher lets you choose between a summary report and a critical report, wait and see how you react to the research material before you decide. If you find yourself strongly agreeing or disagreeing with what you read, a critical report might be in order. On the other hand, if the information seems straightforward and noncontroversial, a summary report would be appropriate.

Choosing a topic. A short report demands a narrow topic. You simply won't have enough space to cover a lot of territory. For example, if you tried to write a paper on "The Circulatory System," "Life in Colonial America," or "The U.S. Space Program," you'd find yourself swamped with information. Topics that could be more easily handled in a short report might be "How White Blood Cells Fight Disease," "Tools Used by Colonial Farmers," or "Life Aboard the Space Shuttle."

One way to get ideas on how to limit your topic is to check an encyclopedia. Using the index or the search feature, look for the general subject heading you're interested in, such as Circulatory System. The article titles listed under the heading will provide you with a starting point for narrowing your topic. Then check the individual articles to see what they cover and how they are organized. A subheading in one of the articles might give you just the idea you need for a suitable topic. Other sources of ideas include the table of contents of a book covering your topic or the articles listed under your topic in a periodical index.

Background reading will help you become familiar with your topic. Encyclopedia articles on your topic are good sources for background reading. As you read, you can decide what kinds of information you'd like to include in your report and what can be left out. It's a good idea to jot down a list of points to serve as a sort of preliminary outline and a guide to your research. Your list might take the form of a series of questions you hope to answer in your report. If your topic is "Life Aboard the Space Shuttle," for example, your questions might include: What does the inside of the shuttle look like? How big are the crew's quarters? How do the astronauts eat? How do they spend most of their time?

Researching the topic involves finding sources, reading them, and taking notes on what you've read. The encyclopedia articles you used for your background reading may have included *additional resources*—lists of books or Web sites that provide additional information about your subject. You can also look through the catalog at your school or public library and check such basic reference works as *The Readers' Guide to Periodical Literature* and *The World Almanac and Book of Facts.*

After you've found good source material, you need to read it carefully and take accurate notes. For a short report that requires only a few sources, you may find it easiest to take notes on lined paper or a notepad. Many people prefer using index cards, however, because they can easily be arranged and organized. If you are using electronic reference materials, you can print out the information you need or save it on a disk. See "A Guide to Research Skills" for more complete information on research sources and how to take good notes.

Preparing an outline is the last step you need to do before writing your report. Prepare an outline even if your teacher doesn't ask for one. It will help you organize your notes and make writing your first draft easier.

Begin preparing the outline by gathering all your notes and reviewing them. Then decide how the information can be organized into major topics and subtopics. Assign a heading to each topic and subtopic. Next, arrange the headings in logical order. For a short report, your outline can be simple, with only a few main headings and subheadings. Here is an example of an outline for the report on "Life Aboard the Space Shuttle":

I. The crew's quarters
  A. Size
  B. Arrangement
II. Basic needs
  A. Breathing
  B. Sleeping
  C. Eating and drinking
  D. Eliminating wastes
III. Daily tasks
  A. Navigating the spacecraft
  B. Communicating with Earth
  C. Performing scientific experiments

This kind of outline is a *topic outline.* It uses words or phrases for headings. A *sentence outline* uses complete sentences for head-

ings. You should be consistent in using one form or the other. Don't mix phrases and sentences in the same outline. For more detailed information about outline format, see page 16.

Writing a short report. After you've completed your outline, stop and think about the information you've gathered. What is the main idea you've discovered? Summarize your main idea and make it your *thesis sentence*. Put the thesis sentence at or near the beginning of your paper. It should tell the reader what your paper is about and should guide you as you write. All the points you make in your report should relate in some way to the thesis sentence. Here is an example of a thesis sentence for the report on "Life Aboard the Space Shuttle":

"Begin preparing the outline by gathering all your notes and reviewing them. Then decide how the information can be organized into major topics..."

> A look inside a space shuttle shows how people can adapt to living under unusual circumstances.

When you're ready to write your first draft, keep your notes and outline nearby. Focus on your thesis sentence and begin. Your notes should provide you with the specific details and examples you'll need to support your thesis statement. Follow the suggestions given in the section "Writing Tips" that begins on page 6 as you write and revise your work.

"All points. . . should relate . . . to the thesis sentence."

Preparing the final copy. After you've made your last revision, you're ready to prepare a clean, fresh copy of your report. If your teacher has given you instructions on how to submit the report, follow them exactly. Otherwise, you can use these guidelines.

If you can, type your report on a computer, a word processor, or a typewriter. Use high-quality paper and check the print. Double-space your report. Make your margins 1 to 1½ inches (2 ½ to 4 centimeters) wide on the left and 1 inch (2 ½ centimeters) on the right, top and bottom.

If you cannot type, write your report in ink on white, lined paper, using one side only. Write as neatly as possible.

Before you submit your paper, reread it carefully to make sure you've copied everything correctly from your final version. Check, too, for last-minute mistakes in spelling or punctuation and for typing errors. Correct the errors as neatly as you can.

Preparing a Book Report

As a student, you will probably write many short papers about books. A written report about a book may be only a brief summary, or it may be a lengthy analysis.

Before you write. See the section "Writing Tips" for a list of preliminary steps that apply to various writing assignments. In addition, here are some specific suggestions to help you prepare for writing a good paper about a book.

Understanding the assignment. It's important that you understand exactly what you are expected to cover in a book report. Does your teacher simply want a summary of the book? If the book is a novel, for example, does your teacher want only a brief retelling of the story? Or are you expected to write a *critique*, in which you state your reactions

and give your opinions about the book? May you select both the book and the topic for your report? Or has your teacher specified the book and the topic? In the case of an assigned novel, for instance, have you been asked to analyze the main character or discuss the theme? In the case of an assigned biography, are you to explain how the subject influenced the times in which he or she lived? Be sure you understand the assignment before you start reading. That way, you'll know what factors to pay particular attention to as you read the book.

Choosing a book. If you are allowed to choose the book for your report, you obviously should pick one that you think you'll enjoy reading, whether it's fiction or nonfiction. Also consider how much time you have available. If a book report is due in three weeks, don't assume you'll have three weeks to read a book. You'll also need several days to write and revise the report. Select a book you can finish well within your time for the assignment.

Consider the reading level of the book as well. Don't pick a book that's too easy to read just so you can finish it quickly. On the other hand, don't choose a book in which the content, vocabulary, or writing style is too difficult. Select a book that seems to be at or slightly above your reading level. The booklists at the end of many *World Book* articles are divided into categories for younger and older readers. The bibliography in the article *Literature for children* also rates books according to various reading levels. If you have trouble selecting an appropriate book, ask your teacher or librarian for suggestions.

"Ask yourself questions to help decide on a topic. What impressed you particularly about the book?... In the case of a biography, did you feel you really got to know the subject?"

Hints for effective reading. If the book you are to report on has a preface or introduction, be sure to read it. It may contain information that will help you understand the author's purpose, the period in which the book was written, and other factors that can help you judge the book fairly. You can also gain background information by checking other sources, such as *World Book*, for a biography of the author or articles on other related subjects.

If the teacher has specified the topic you are to report on, pay particular attention to the parts of the book that pertain to that topic. Take notes as you go along, and record page numbers of passages you want to remember. If the book is your own copy, you may underline or otherwise highlight important parts and make notes in the margins.

Choosing an appropriate topic. If the topic of your book report is your choice, take time after you've finished the book to think about what you've read. Ask yourself questions to help decide on a topic. What impressed you particularly about the book? In the case of a novel, for example, did the story keep you interested to the very end? Did you sympathize with the characters? In the case of a biography, did you feel you really got to know the subject? Did the author present an unbiased view of the subject? Did the author of your book have a style that you liked—or didn't like? Did you learn anything especially interesting about human nature, a historical period, or another country?

You may decide there were more things you *didn't like* about the book than you liked. Whatever your overall impression was, it's best to select one or two aspects of the book as the topic of your book report.

Preparing an outline. After you've decided what your topic will be, it's helpful to make an outline to guide your writing. The outline may consist of a simple list of points you want to cover. Or it may be a traditional outline, as described in the section on "Preparing a Short Report."

Writing a book report. Follow the suggestions in the section "Writing Tips" on pages 6-10 as you write the first draft and revisions. Remember the need for a strong introduction, a supportive body, and an effective conclusion.

In the body of your book report, back up your thesis sentence with direct references to the book. Interweave your personal comments with summaries of specific parts of the book or direct quotations. If you quote directly, be sure to copy accurately, use quotation marks, and include the page number in parentheses after the quotation. If you quote from a source other than the book you're reporting on, you'll need to use a footnote. See page 17 for information on how to prepare footnotes.

When you're ready to prepare your final copy, follow your teacher's instructions precisely. If you have no instructions, use the guidelines on page 19. Double-check quoted material to ensure you've copied it exactly.

Preparing a Research Paper

"Research paper." The very words make some students quake with fear. Preparing a research paper *is* a big job. But if you go about it the right way, it's a manageable task. It helps to start out with a positive attitude.

Think of your research paper assignment as a chance to learn a lot more about something that interests you. It's also an opportunity to develop skills in information gathering, organization, and writing. These skills will make you better equipped to handle many other school assignments and perhaps job duties later in life.

Like a short report, a research, or term, paper is based on research. But a research paper is longer—generally eight or more pages—and it requires checking more sources. It also has more parts, including a title page, an outline, footnotes, and a list of sources. The following sections give specific guidelines you'll need for preparing a research paper.

Before you write. You may be surprised to learn that *writing* your research paper is one of the last steps you'll do after receiving the assignment. There are many tasks that need to be completed before you can begin writing.

Making a schedule. Planning ahead is a good idea for any writing assignment. For a research paper, it's a must. You might have several weeks, or even months, to prepare a research paper. Whatever you do, don't let yourself be lulled into thinking you can relax until a week or two before the deadline. As soon as you get your research paper assignment, make a schedule.

Consider other assignments and commitments you have and plan to spend a certain number of hours a day—perhaps two or three—working on your research paper. Then mark the due date for the paper on your calendar. Count backward to plan blocks of time for finishing the final draft, revising the first draft, writing the first draft, organizing your note cards, and preparing a final outline.

"Planning ahead is a good idea for any writing assignment. For a research paper, it's a must... Consider other assignments and commitments you may have..."

Follow these guidelines to plan a realistic schedule:

1. Give yourself at least an hour per page to write the first draft.

2. Plan to spend at least two hours per page revising the first draft. (Don't include the final outline and the list of sources in this estimate.)

3. Allow about an hour per page to type the final copy, including all text pages, the final outline, and the list of sources. That hour or so includes time for proofreading, making corrections, and placing footnotes correctly.

4. Allow one day to organize your notes and one day to prepare your final outline.

The time left will be used to choose your topic, read, gather information, and take notes.

Choosing a topic. In most cases, your instructor will allow you to choose the topic for your research paper. One way to begin the selection process is to choose a broad topic and then narrow it down. Look at the study aids at the end of the article in *World Book*.

Remember that you'll be spending much time on your research paper, so be sure you choose a topic you're really interested in. Give your topic choice careful thought. Even if you don't particularly like the subject, you can probably find a specific topic within the subject area that appeals to you. For example, perhaps you don't care much for United States history, but you love music. A U.S. history research paper on songs of the Civil War could be more fun to prepare than you thought possible.

Be sure to narrow the topic of your research paper to manageable size. Don't be fooled into thinking that you'll have plenty of time and space to cover a broad topic. It's far better to cover a narrow topic in depth than to skim over a broad topic. See the section "Preparing a Short Report" for how to narrow your topic.

Another important point to consider in selecting a research paper topic is the availability of research materials. Go to the library or media center and check the library catalog and *The Readers' Guide to Periodical Literature* to be sure enough books or articles have been written on your topic. If no such books or articles are available, your topic may be too recent or too specialized.

Background reading. After you've chosen your research paper topic, do some background reading. A good, up-to-date encyclopedia can be an excellent place to begin. An encyclopedia won't give you all the information you need, but it will provide an overview of the topic. Check the index and read the various articles that deal with your topic. Most likely, your background reading will turn up aspects of your topic you hadn't thought of. You may find yourself reshaping your topic according to something that strikes your interest. As you read, jot down ideas that occur to you about what you'd like to cover in your paper. Note charts, tables, photographs, maps, and bibliographies that could be helpful.

The preliminary outline. With your background reading behind you, you're ready to prepare a preliminary outline for your research paper. The outline will help you organize your thoughts and guide your research.

Begin your preliminary outline by figuring out what the main idea, or purpose, of your research paper is. This purpose is called the *thesis.* Try to state it in one sentence. As you're figuring out your thesis, also decide what kind of *approach* your paper will take. If your subject inspires strong opinions, you may want to take a *pro* or *con* approach, in which you take a stand for or against a certain proposition. Some papers use a *descriptive* approach or an *explanatory* approach. Other papers attempt to *prove* or *disprove* a theory or idea. You may choose to *compare or contrast* two or more things or show the *cause and effect* of something. A *chronological* approach, which traces the order in which events occurred, suits some topics. Other topics lend themselves to an *analytical* approach, in which a topic is thoroughly examined.

After you've decided on your thesis and approach, ask yourself what points you want to cover to support your thesis. Write down each point as the basis of your preliminary outline. At this stage, you needn't be too concerned about the order or completeness of your outline. Remember it's a *preliminary* outline; so keep it simple. You're likely to change it as you explore your topic in greater depth. The important thing is that you give yourself a clear direction before you begin to conduct your research.

Preparing a list of sources. The next step you need to perform is preparing a list of sources to consult in your research. To begin with, go back to the encyclopedia articles you read earlier to see if they include lists of sources to check for additional information. Many *World Book* articles, for example, include *bibliographies*—lists of books for further reading.

In addition, many of the sources you consult for your paper will include additional source lists or bibliographies. You'll find additional sources when you check the catalog, magazine and newspaper indexes, and electronic sources in your library.

For each source you locate—book, article, pamphlet, record, tape, Web site, and so on—make a note. If you are using a computer, you can add each source you find to one list. If you are writing your source list, use one index card for each source. These cards will be easy to organize and alphabetize when you later prepare your final list of sources. If a source does not have usable information, make a note on your list, or draw a line through its card. But keep the note so that you'll have a record of every source you checked in doing your research.

Doing research. The quality of your research paper depends greatly on the information in it. It's important to find reliable, interesting information and record it in accurate notes.

You may need to examine various kinds of sources before you find the best possible ones. Books and articles are traditional sources. But you may discover that your best information comes from a survey or interview, the Internet, or a museum or historical society in your community. Valuable information may turn up in places you least expect to find it. The notes on a record jacket, for example, could provide interesting details for a report on the origins of rock music. View your research as an investigation. You're out to track down leads and find the facts you will need to write the best paper you can.

See "A Guide to Research Skills" beginning on page 26 for detailed suggestions on how to use the library or media center and on how to get information from various sources. The guide also gives specific instructions on taking notes.

The final outline. When you feel you have all the information you need, it's time to review and organize your notes. Go back and read them carefully. Then look at your thesis statement. Does it still make sense? Should it be changed somewhat on the basis of what you learned from your research? Remember, the thesis statement should summarize the purpose of your paper. Be sure you've got it right before you go any further.

Next, arrange your information according to your preliminary outline. Does the outline still work? Is your approach still appropriate? Should you change or rearrange any of the main headings? Are there information gaps that need additional research? Can any of your notes be set aside because

they don't further the purpose of your paper?

All these questions will help you get ready to prepare your final outline. The final outline will direct your writing. It should be an accurate guide to what you plan to include in your paper.

After you've arranged your information in logical order, group it into large, obvious divisions. These divisions will be your main topics. Three to five main topics are generally enough for a research paper. Next, see how your main topics can be subdivided. These subtopics must relate to the main topic. You must have at least two subtopics under a main topic—or none at all.

The final outline may be a topic outline or a sentence outline, but not a combination of them. In either form, all the headings must be expressed in parallel phrasing. All topics of equal importance must be equally indented. Topics and subtopics are identified by Roman numerals, capital letters, Arabic numerals, and lower-case letters, in that order, followed by periods. The bottom of this column shows an example of a final outline for a research paper, preceded by the thesis sentence.

Writing your research paper. At this stage, most of the work is behind you. If you've done a good job on all the preceding steps, the writing should go smoothly.

Writing the first draft. With your final outline before you and your notes arranged in proper order, you're ready to begin writing your first draft. Write or type the draft on one side of the paper only. Use double- or triple-spacing and wide margins to make later revisions easier.

As you write your first draft, concentrate on putting your ideas down in a clear and orderly fashion, with smooth transitions from one point to the next. Your thesis sentence should appear in the introduction and guide you as you write. The details you include in the body of your report should relate to the thesis sentence. Your conclusion should restate your thesis in an effective way.

If you use a quotation, copy it exactly and enclose it in quotation marks. A quotation that is more than five lines long should be indented and single-spaced, with no quotation marks. If you omit part of a quotation, use an ellipsis (...) in place of the part left out. If you need to add words of your own to make the meaning of the quotation clear, enclose those words in brackets ([]).

Preparing footnotes. Quotations and certain other material in your research paper require footnotes. The main purpose for footnotes in a research paper is to *document sources*—that is, to give credit to the author whose words or ideas you are using. Even if you restate someone else's idea or opinion in your own words, you must credit that person. Otherwise you may be guilty of *plagiarism*—stealing someone else's words or ideas and passing them off as your own. You should also footnote facts or figures that a reader might have cause to question.

As you write your first draft, put a footnote number in the margin whenever you write something that needs documentation. On a separate sheet, write the footnote number and information about the source—title, author, and page number. You'll use this information later when you type your final draft.

Some instructors require that footnotes appear at the bottom of each page on which documentation is required. Others prefer to have all footnotes on a separate sheet headed "Notes" after the text of the paper. Some allow putting footnotes in parentheses after the quotation or material being footnoted. Be sure to follow your teacher's preference.

Footnotes are numbered consecutively from 1 up throughout the paper. The number of the footnote appears slightly raised above the line, after the quotation or other material being footnoted. That same number appears before the footnote itself at the bottom of the page or on the separate "Notes" sheet. The footnote number is raised slightly above the line, and the start of the footnote is indented like a paragraph.

Footnote form varies. Be consistent, and follow your teacher's

THESIS SENTENCE: Computers are learning tools that can significantly improve the writing skills of students, and they should be made available nationwide.

I. Current availability
II. Uses in the classroom
    A. Encyclopedia and Internet research
    B. Interactive learning programs
    C. Testing spelling and other skills
    D. Word processing
III. Benefits to users
    A. Individualized instruction
    B. Immediate feedback
    C. High student interest and motivation
IV. Sources of funding
    A. Government programs
        1. Federal
        2. State
        3. Local
    B. Private foundations
    C. PTA's and other local organizations

instructions. Here are some examples of correct footnote form for a book with one author, a book with two authors, an edited book, a magazine article, an encyclopedia article, and a personal interview:

[1]Tony Hare, *The Greenhouse Effect*, p. 17.

[2]Victoria Wise and Susanna Hoffman, *The Well-Filled Tortilla Cookbook*, p. 234.

[3]Sylvia K. Burack, ed., *The Writer's Handbook*, p. 403.

[4]James C. Giblin, "Writing Children's Books for Today's Readers," *The Writer*, April 1, 2000, p. 7.

[5]Jay Pasachoff and Leon Golub, "Sun," *The World Book Encyclopedia*, 2001, Vol. 18, pp. 974-987.

[6]Peg Lightner, personal interview.

The following examples show correct footnote form for a microform, an information service, a computer program, a Web site, and a videotape recording:

[7]Chapman, Dan. "Panel Could Help Protect Children." *Winston-Salem Journal* 14 Jan. 1990: 14. *Newsbank: Welfare and Social Problems* 12 (1990): fiche 1, grids A8-11.

[8]Barbara M. Moskal, Scoring Rubrics: What, when, how (College Park, MD: Department of Measurement, Statistic, and Evaluation, University of Virginia, March 2000), 2, ERIC http://ericae.net/para/getvn.asp?v=7&n=3

[9]Building Life Cycle Cost Program Rel. (BLCC 4.8-00) (Washington, D.C.: Federal Energy Management Program).

[10]Paul Gorenstein, "Moon," World Book Online; http://www.worldbookonline.com/na/ar/fs/ar370060.htm, December 3, 2001.

[11]*Sitting for Success: The Basics of Babysitting*, VHS, 30 min., 1998, distributed by GRA Video Production Services, Elgin, IL.

For later references to a previously cited source, you can use a shortened footnote form, such as the author's last name and the page number. Some teachers prefer Latin abbreviations, such as *ibid.* and *op. cit.* (see the Glossary on page 35). Follow your teacher's preference.

Preparing the list of sources. The list of sources contains all the sources—books, articles, pamphlets, letters, interviews, Web links, and so on—that you used to prepare your research paper. Do not include sources that you consulted but didn't use. The list of sources tells the reader both where you got your information and where further information on the topic can be obtained.

With your source cards or printout at hand, preparing your final list is easy. Simply arrange the cards in alphabetical order by author (or title for a work that has no author), and copy the information. Generally, source list entries are not numbered.

There are various forms for source lists. Be sure to use the one your teacher prefers. Here is a sample list, with entries for various types of sources:

Burack, Sylvia K., ed. *The Writer's Handbook*. Boston: The Writer, Inc., 1991.

Davis, Kristin, and Kainen, Bertha. "Kids in Business." *Changing Times*, March 1990, pp. 96-97.

Hare, Tony. *The Greenhouse Effect*. New York: Watts, 1990.

Lightner, Peg. Educational Review Committee Member. Personal interview, August 20, 1991.

National Futures Association. "Inventors' Bill of Rights." Pamphlet no. 549, 1987.

Jay Pasachoff and Leon Golub, "Sun," *The World Book Encyclopedia*, 2001, Vol. 18, pp. 974-987.

"Updates from the Fitness Front." *The Washington Post*, March 13, 1990, Sec. WH, p. 22.

Wise, Victoria, and Hoffmann, Susanna. *The Well-Filled Tortilla Cookbook*. New York: Workman Publishing, 1990.

Preparing an appendix. You may decide to include tables, charts, graphs, diagrams, lists, or other material with your research paper. If so, place the material at the end of the paper and label each item Appendix A, Appendix B, and so on. Each item should also be given a title. In the appropriate place in your text, you can refer to the material with a cross-reference to the specific appendix. You can write, for example, "for a graph showing the nation's population growth, see Appendix A."

Revising your first draft. If time permits, set aside the first draft of your research paper for at least a day before you begin to revise it. Then cast a critical eye on it and judge it for content, organization, and style, as well as for such mechanical details of grammar, spelling, and punctuation. See pages 8-10 for detailed guidelines on revising your work.

Revising a research paper involves a few more steps than are needed for most other written work. First, see that your footnotes are numbered correctly and have the required information. Second, check any direct quotations to be sure they are worded

"Prepare a title page...Fasten your paper in the upper left-hand corner, or put it in a folder or binder...Then congratulate yourself. You're finished, and the paper is ready to turn in."

accurately. Finally, check the list of sources to see that it is alphabetized properly and that each entry has all the required information with correct punctuation.

The final copy. If your teacher has given you a style sheet, be sure to follow it precisely as you prepare your final copy. If there is no style sheet, follow these guidelines:

1. Type or print out your report on high-quality white paper, using one side only. (If you must prepare a handwritten report, write in ink on standard ruled paper.)

2. Leave a margin of 1 to 1½ inches (2 ½ to 4 centimeters) on the left and 1 inch (2 ½ centimeters) on the right, the top, and the bottom of the paper. However, start the outline page 2 inches (5 centimeters) from the top.

3. Double-space the text.

4. Indent paragraphs five spaces.

5. Single-space the outline, but double-space between the main headings.

6. Indent the first line of a footnote five spaces, and put the second and following lines flush with the left margin. Single-space the lines within a footnote, but double-space lines between footnotes.

7. Begin each item on the list of sources at the left margin and indent the second and following lines five spaces. Single-space within each entry, but double-space between entries.

8. Single-space quotations that are indented rather than run-in with the text.

9. Number all pages except the title page. User lower-case Roman numerals (i, ii, iii, ...) for the outline pages and Arabic numerals for all other pages. Center the number at the bottom of the first page of the outline, the text, and the bibliography. Center the number at the top of all other pages.

10. Prepare a title page, which contains the title, your name, and the date. You may also include the name of the teacher and class.

After you've finished typing or writing all the parts of your paper, assemble them in this order:

1. The title page.

2. The final outline, including the title of the paper and the thesis sentence.

3. The text of the paper, with the title of the paper repeated in all capital letters on the first page.

4. A page titled NOTES, which lists the footnotes if you did not put them at the bottom of each page.

5. The list of sources.

6. The appendix, if included.

Fasten your paper in the upper left-hand corner, or put it in a folder or binder. You may want to make an extra copy. Then congratulate yourself, You're finished, and the paper is ready to turn in.

A Guide to

SPEAKING SKILLS

If you're like most people, you spend a lot of time talking. Yet the thought of making a speech before an audience may fill you with dread. If so, you're not alone. Many people are terrified if they have to make a public speech.

The guidelines given here for preparing and delivering a speech can help you become a confident speaker. You may never have to address a huge audience. But as a student, you'll give a variety of oral presentations. And chances are that sometime during your life you will be asked to give a committee report at a club meeting, ask for donations for a charity, or make a presentation to your boss. Learning how to handle speaking situations with ease is a skill well worth developing. It will help you communicate more effectively in a wide variety of everyday situations.

Preparing a Speech

There are six basic steps to follow in preparing a speech. They are (1) analyzing the audience, (2) choosing a topic, (3) determining the purpose of the speech, (4) gathering information, (5) organizing the content, and (6) choosing a format.

Analyzing the audience. To speak effectively before a group of people, you need to know something about them. You need to know such factors as their age and educational level and their attitudes regarding various subjects. You also must know the size of your audience.

Age and educational level. People of different ages and educational levels have different vocabularies and different abilities to understand ideas. Be sure your audience can understand what you're talking about and adjust your vocabulary to their abilities. Also consider how much knowledge about the topic your audience already has. For example, a speech about Apache Indian crafts presented to a group of 8-year-

olds would be far different from a speech on the same topic presented to a group of high school students. The language you use and the number and kinds of facts you present would differ.

Attitudes. If you are presenting a controversial topic, try to find what attitude your audience already holds toward the topic. Are most of the members inclined to agree or disagree with the position you will present? Or are they indifferent? If they're indifferent or likely to disagree, you may have to gather more facts and present them more forcefully to be effective.

Size. A large group may require a more formal speech presentation than a small group. If the group is large, you may be speaking behind a podium or on a stage. If the group is small, you simply may be seated at a table with the other members of the group. These factors may influence your choice of speech format and your delivery techniques.

Choosing a topic. There are several points to consider in choosing a topic. First, choose a topic that interests you or that you already know something about. You're more likely to enjoy preparing and delivering a speech on a topic you like than on one you don't particularly care about. You're also more likely to get a good response from your audience. Second, consider the probable interests of your audience. A speech on how to improve scores on video games might win an enthusiastic response from a sixth-grade class. But such a speech would probably be of little interest to a group of senior citizens. Third, make sure the topic and tone of your speech fit the occasion. You would not make the same kind of speech at a graduation ceremony that you would at a pep rally. Fourth, if your topic requires research, see that the necessary information is readily available. Finally, make sure you can cover your topic adequately within the time allowed. Limit your topic so you can present your main idea and support it with meaningful details.

Determining the purpose. Almost every speech has at least one of three main purposes: (1) to inform, (2) to persuade, or (3) to entertain. An *informative speech* provides information and consists largely of facts presented in a straightforward manner. A *persuasive speech* tries to convince an audience to do something or adopt a particular point of view. Persuasive speeches may rely on emotional appeals as well as facts to achieve their purpose. An *entertaining speech* provides a pleasant experience for the audience and may have a more informal tone than the other two kinds of speeches.

Many speeches have two or three main purposes. For example, you may try to entertain the members of your audience in order to win them over—or persuade them—to accept your point of view.

Gathering information. If your speech requires information you don't already have, you'll need to do research. Here are three ways to go about it:

1. *Observe the subject matter itself.* If your speech is about how newspapers are recycled, for example, you could visit a recycling plant to observe the process.

2. *Use the library.* The books, magazines, newspapers, pamphlets, electronic databases, Web sites, and other materials you'll find will provide information on almost any speech topic.

3. *Interview an expert or others who have firsthand knowledge.* If you're preparing a speech on the effects of budget cutbacks on elementary schools, for example, you might interview the principal and some of the teachers at a local elementary school.

For pointers on how to do research, see "A Guide to Research Skills" on pages 26-34.

Organizing the content. Like a written report, a good speech needs good organization. Most speeches are organized in three parts: (1) the introduction, (2) the body, and (3) the conclusion.

As you develop the content of your speech, always keep in mind the importance of attracting your audience's interest in the beginning and holding it to the end. The introduction to your speech needs to tell the members of your audience what your speech is about—but in a way that will

"Be sure your audience can understand what you're talking about and adjust your vocabulary to their abilities."

make them want to listen. Don't begin by saying, "This speech is about...." Instead, try using a personal anecdote or lead in with a dramatic statement.

In the body of the speech, present your main points and supporting details. Make sure the details are closely related to your topic and interesting to your audience. You can present your main points in several ways, depending on your topic. You can arrange them in order of importance, putting the most important points first. You can use chronological order, describing events in the order in which they occurred. In some speeches, you might discuss a topic that is new to your audience or difficult to understand. In such cases, begin with the simplest facts and work your way up to the more difficult ones. Or think of something that the members of your audience already know about that could help them understand the new or more difficult topic.

The conclusion of your speech is your last opportunity to impress the members of your audience. Try to leave them with something to think about. In many cases, a quotation from a famous person could provide a memorable conclusion to your topic.

An outline can help you organize the ideas and facts that make up each part of your speech. The phrases or sentences of the outline briefly state the points to be presented. You may use a formal outline format like the one on page 11 in "A Guide to Writing Skills." Or your outline may consist of a simple list of points to be covered—in proper order, of course. You can use the outline as a guide when you deliver your speech.

Choosing a format. You need to decide what kind of format to use in delivering your speech. You have four choices: (1) reading the speech, (2) memorizing the speech, (3) speaking impromptu, and (4) speaking extemporaneously. In choosing a speech format, make sure it is one you are comfortable with and one that suits the occasion. Each format has advantages and disadvantages.

Reading the speech may seem like the safest format. You don't have to worry about forgetting anything, and you can make sure your speech precisely fits the allotted time. But reading your speech also has disadvantages. You may become so engrossed in your manuscript that you forget to look up at the audience. You may begin speaking in a monotone-tone, causing your listeners to lose interest. Once they've lost interest, the point of your speech may never get across. Reading your speech also makes it difficult to adjust the content in response to audience reactions.

If you choose to read your speech, type it double-spaced or write it out neatly so that you can read it easily. Some people write their speeches on large note cards and make an effort to look up at the audience at least at the end of each card.

Memorizing the speech requires that you first write it out and then memorize it word for word. Depending on the length of the speech, this type of delivery could mean hours or days of extra preparation time and effort. The format also has several other disadvantages. You might skip an important point or forget what comes next. You might concentrate so hard on remembering the speech that your voice sounds unnatural. And you'll be unlikely to add remarks or otherwise adjust your speech to suit the mood of the audience. If you decide to memorize your speech, you'll have to keep in mind the need to make your delivery natural and relaxed.

Speaking impromptu requires little or no preparation. As a result, it is rarely used for a formal speech. Comments offered at a committee meeting or club gathering are examples of impromptu speaking. This format can succeed only if you are well-informed about the subject. An impromptu speech enables you to give a lively, spontaneous delivery. What you say can be suited specifically to the mood of the audience. But an impromptu speech risks being unorganized. Without adequate preparation, you may ramble and never get your point across effectively. If you know ahead of time that you'd like to say something at a meeting or other occasion, take at least a few minutes to organize your thoughts and perhaps jot down your main ideas to serve as a checklist.

Speaking extemporaneously is the most commonly used type of delivery in public speaking. You organize your ideas in a written outline and use it as a guide when you give your speech. An extemporaneous speech has the advantage of being both organized and spontaneous. Although you don't write down the complete speech, you can refer to the key words or sentences of the outline to keep yourself "on track." You can easily add or omit details on the basis of audience reaction. And it's not as difficult to maintain eye contact with your audience when you speak extemporaneously as it is when you read from a manuscript.

To take full advantage of the flexibility of the extemporaneous speech, learn about your topic in depth. Gather more details than you'll actually need. That way,

A speaker's check list.

There are many steps involved in the preparation of an effective speech. It is easy to forget a step or two along the way. And yet this would be the kind of mistake that could ruin a presentation. If you are about to begin the preparation of a speech, use the following questions to make sure you "cover all the bases."

	YES	NO
1. Have I carefully studied and analyzed the audience?	____	____
2. Have I chosen a topic for my speech that not only interests me, but is also adaptable to the likes and dislikes of my audience?	____	____
3. Have I set the purpose of my speech?	____	____
4. Have I carefully gathered all of the information and materials I will need to document my speech?	____	____
5. Have I developed a well-organized and logical outline for my speech?	____	____
6. Have I rehearsed my presentation to the point that I am sure I can deliver the speech confidently and without hesitation?	____	____

you'll have a full stock of material to draw upon to keep your speech interesting. You can also vary the content, depending on the audience's reaction.

Rehearsing and Delivering a Speech

After you've completed all the steps in preparing your speech, you're ready to begin rehearsing unless you're going to give an impromptu speech. Rehearsing is obviously necessary for a memorized speech, but it is also vital to a good extemporaneous speech or to a speech you plan to read. The more you rehearse your speech, the more confident you'll be when the time comes to deliver it.

As you rehearse, remember that you want to convey more than information. You also want to convey enthusiasm for your topic. If *you* sound interested, your *audience* will be more likely to listen to, and enjoy, your speech.

How to rehearse. Begin rehearsing by using your outline or reading aloud from your manuscript. As you repeat the speech many times, you'll come to depend less and less on your written words. If possible, make a tape recording of your speech and listen to it critically. You may find that you're not pronouncing all your words clearly or that you're going too fast or too slow.

Next, practice in front of a mirror, paying attention to your posture and gestures. Then, ask someone to listen to your speech and give an honest reaction to both content and delivery. Your listener may be able to spot distracting mannerisms that you should correct, such as clenching your fists at your sides or shuffling your feet. You can also videotape yourself to observe your own strengths and weaknesses. Finally, if you will be delivering your speech in an unfamiliar place, try to practice it there at least once. That way, you can practice with a podium and microphone if they are to be provided.

Your voice. The way you use your voice can add greatly to the impression you make when delivering your speech. As you speak, pay special attention to the *volume, speed,* and *pitch* of your voice and to *clarity of pronunciation.*

Volume. Obviously, you'll want to speak loudly enough so that the audience can easily hear you. You'll have to consider such factors as the size of the room, whether you'll be using a microphone, and whether there are outside noises you must speak over. Try to vary your volume to make your voice sound more interesting. At times, you might speak more loudly to emphasize an important point. At other times, you might gain attention by speaking more softly, making the audience listen more carefully.

Speed. Don't speak so fast that you slur your words or become difficult to understand. If you have a time limit, pace yourself so that you can finish your speech without having to hurry at the end. Varying your speed from time to time can make your speech more effective. You can slow down to emphasize a point. And a dramatic pause at the end of a particularly important statement can be an effective technique.

Pitch is how high or low your voice sounds. You vary your pitch automatically during normal conversation. Your voice sounds higher when you are excited and lower when you are serious. During a speech, your voice should follow this natural pattern of pitch variation. Try to avoid speaking in a monotone.

Clarity of pronunciation. Speak as distinctly as you can without sounding unnatural. Avoid saying "er" or "uh" between words or phrases. Enunciate word endings, such as *-ing,* clearly.

Your appearance and the way you use your body can be almost as important as your voice when you give a speech. Dress neatly in comfortable clothing that is appropriate to your audience. Avoid wearing unusual clothes or jewelry that might distract the audience or get in your way as you speak. Stand up straight, but in a relaxed manner. Don't slouch or lean on the podium if you're using one. Try to keep a pleasant expression on your face.

As you speak, keep eye contact with your audience. Don't look up at the ceiling or down at the floor. If you're reading from a manuscript, hold it up slightly so that you can easily glance at the audience from time to time.

Gestures can help emphasize important parts of your speech. But don't overdo them. If you gesture constantly, you'll lessen the effect and make the audience more aware of your gestures than your words. And make sure your gestures look natural and blend smoothly with what you're saying.

Audio-visual aids can enliven your presentation. Such aids include drawings, photographs, maps, charts, graphs, diagrams, chalkboards, models, slides, computer graphics, films, records, tape recordings, and videotapes. Audio-visual aids can add welcome variety to your speech and help hold the audience's attention. They can enable the audience to understand exactly what you mean. They can also make your speech more memorable by leaving the audience with a more vivid impression of your topic than words alone can convey.

Whichever kind of audio-visual aid you choose, be sure it serves a definite purpose. An effective aid should clarify, illustrate, or dramatize a fact or idea. For example, a speech explaining how the human ear works would benefit from a drawing, model, or computer animation of an ear. A discussion of various dialects might be greatly enhanced by a tape recording.

Be sure your audio-visual aid fits your needs precisely. If you want to show where major battles of the Civil War occurred, for example, don't use a map of the entire Western Hemisphere. In graphs and charts, the use of different colors can make statistical comparisons much easier to understand. You also need to be sure that your visual aid is big enough to be seen by the entire audience and that it is clearly labeled. Take into consideration the size of the room and the size of the audience as you choose and prepare your audio-visual aids.

Rehearse with your audio-visual aids so you can incorporate them smoothly into your speech. Here's a list of points to remember when using audio-visual aids:

1. Have them set up and ready to use before your speech. If an aid is particularly interesting or unusual, it may be a good idea to have the aid handy, but hidden, until the appropriate time in your speech. Otherwise, your audience may be too distracted to pay close attention to the earlier parts of your speech.

"The more you rehearse your speech, the more confident you'll be when the time comes to deliver it... Begin rehearsing by using your outline... Practice in front of a mirror, paying attention to your posture and gestures."

"Audio-visual aids can add welcome variety to your speech... They can also make your speech more memorable by leaving the audience with a more vivid impression of your topic than words alone can convey."

2. Mount illustrations and set them up on an easel, rather than trying to hold them while speaking.

3. If you're going to write on a chalkboard or paper, remember to keep turning back to your listeners to keep your eye contact with them.

4. If you'll be using such equipment as a film, a tape, a videotape recorder, or a computer, check it out before you speak. Be sure it's in good working order and that an electrical outlet is nearby.

5. Don't pass a visual aid around during your speech. It's too distracting. If you have material to pass out, do it before or after your speech.

6. Don't stand in front of a visual aid or block the view of part of the audience.

7. Remember to talk to the audience, not to the aid.

Stage fright. When the time finally comes to deliver your speech, you'll probably suffer from that common ailment—stage fright. To keep your nervousness from working against you, concentrate on what the person speaking before you is saying, rather than worrying about your own presentation.

When your turn comes, take a deep breath or two to help stay calm. *Act* confident, even if you don't *feel* confident. Remember that your audience is rooting for you to do well. Walk briskly to your place and look directly at the audience to gain the group's attention. Then begin. Once you begin speaking, your nervousness will decrease.

A Guide to RESEARCH SKILLS

Questions. Life is full of them. Most of us spend time each day asking questions and finding the answers to them. What's the quickest way to get to Uncle Bill's house? How much will a new bike cost? Who can fix that broken watch? Some questions are easily answered. But others are more difficult, and you may need help in finding the answers.

Asking questions and finding answers is what research is all about. It involves locating and retrieving information and then working with or communicating that information. If you know where to go or the person to ask to get answers to your questions, you've developed a skill that you can use all your life—in school, in a career, and in many everyday situations. Developing good research skills can help you find information more quickly and efficiently, thus saving time.

This section will help you become familiar with the library and its resources. You'll also learn other ways to get information and how to take notes so you can put your information to good use.

Getting to Know the Library

What the library provides. The library is probably the first place that comes to mind when you think about doing research. Libraries—or *media centers* in many schools—contain more information than any one person could learn in a lifetime. That information comes in many forms. Books, magazines, and newspapers make up the major part of most school and public libraries. Many libraries also have pamphlets, brochures, computerized information, microreproductions, prints, photographs, maps, audiotapes and videotapes, slides, and movies. In addition, a library may have videotape recorders, slide and movie projectors, personal computers, copiers, satellite dishes, and other equipment.

Whether you're using a small school library or the main branch of a major city library system, it's good to know what materials and services the library provides. Some libraries provide online orientations to familiarize you with their services. Many libraries have brochures that describe what they

offer. Ask for one and read it. Then take some time to browse around in the library to become familiar with the various sections.

Sections of the library. Most libraries have two major sections—the general circulation section and the reference section. The general circulation section contains books and other materials that may be checked out of the library. In that section, you're likely to find all the fiction and most of the nonfiction books your library owns. The reference section has materials that, in most instances, must be used in the library. Most books in the reference section are not the kinds you would read from cover to cover. They include encyclopedias, dictionaries, atlases, and other reference works that play an important role in research. In some libraries, the reference section may consist of a few shelves. In other libraries, it may be a separate room or a series of rooms.

Librarians themselves are an excellent resource when doing research. They can help you find an answer to a specific question, such as "When was Babe Ruth born?" Or they can direct you to sources that contain information on a broader topic, such as the history of baseball. Some libraries have several librarians who specialize in different kinds of information and services. For example, a reference librarian would be more familiar with the library's reference section than a children's librarian would be. A librarian also can help familiarize you with the library's various electronic and mechanical resources and devices, such as the Internet, a CD-ROM, or a photocopier. For more information about librarians, see Library (Assisting patrons; Communicating information.)

Exploring the library catalog. The library catalog is your guide to locating the vast resources of the library. It has information about every book the library contains and gives its location. Catalogs may also include entries for records, tapes, films, and other nonprint items. If your library does not include entries for nonprint items in its catalog, ask where such material is indexed.

Library catalogs take various forms, from traditional card catalogs to computer catalogs. It's important to learn how to use whatever type of catalog your library has. If you go directly to the shelves without checking the catalog, you may never know about books that have been checked out or are waiting to be reshelved. If you know your library has a particular book, but can't find it on the shelves, the librarian—or *media specialist* in many school libraries—may be able to see if it's simply waiting to be shelved. Most computer catalogs show if an item is on the shelf or checked out. If the book has been checked out, you can ask that a "reserve" be put on it. You will then be notified when the book is returned.

The card catalog is the traditional form of library catalog. In many libraries, however, it has been replaced or supplemented by other kinds of catalogs. The card catalog consists of one or more cabinets with drawers of file cards arranged alphabetically. For most books, there is one card under the author's name, one under the book title, and one or more under the general subject. Some books may have additional cards for a joint author, an editor, a translator, or an illustrator.

The author card is called the *main entry.* The other cards are *added entries.* They look much like the main entry, but they have an additional line at the top, giving the title, the subject, or some other heading above the author's name. The cards are arranged in alphabetical order, according to the words on the top line. Each drawer has author cards, title cards, and subject cards, all interfiled alphabetically.

The subject cards are the best place to begin library research if you don't have a specific title or author in mind. To find books on your topic, you first need to think of an appropriate subject heading. Try to think in specific terms, rather than broad generalities. For example, look under HIMALAYA, rather than MOUNTAINS; DICKINSON, EMILY, rather than POETS. If you have trouble finding books on your topic, ask the librarian to suggest other subject headings to look under.

Filing rules. It's helpful to know the library rules for filing catalog cards. These may vary somewhat among libraries. Here are some of the rules commonly used:

1. Cards are arranged in alphabetical order, letter by letter to the end of the word, then word by word to the end of the heading. Punctuation marks are disregarded.

2. If a title begins with "a," "an," or "the," the card is filed beginning with the next word in the heading.

3. Abbreviations are arranged alphabetically according to the letters in the abbreviation, not the letters of the entire word that is being abbreviated. In the list below, "Col. Adams" appears before "Collection of poems" because, alphabetically, the letters *c-o-l-a* come before *c-o-l-l.*

Coal	New York
Col. Adams	No. 8
Collection of poems	Number
Colonel Jones	N.Y.

4. Numbers written as numerals are filed ahead of words consisting of letters and are arranged according to their numerical val-

ue: 2, XX (Roman numerals for 20), 1994. Numbers spelled out as words are filed alphabetically: nineteen ninety-four, twenty, two.

5. Names beginning with Mc and Mac are listed alphabetically and treated as one word.

Macadamia nuts	Macmillan, Thomas
Macbeth	McAdam
Machinery	McHenry
Maclean, John	McLean, Alan

6. Historical subheadings are filed in chronological order:
U.S.—HISTORY—WAR of 1812
U.S.—HISTORY—CIVIL WAR
U.S.—HISTORY—1920-1929
U.S.—HISTORY—WORLD WAR, 1939-1945

7. Catalog entries for books *by* a person are filed before entries for books *about* that person.
Some filing rules do not apply when using computer catalogs. Unlike the card catalog, the computer catalog does not interfile all the records. Instead, the catalog has separate indexes containing authors, subjects, or titles. In addition, the computer catalog files alphabetically rather than chronologically. For example, the computer screen would display U.S.—HISTORY—CIVIL WAR before U.S.—HISTORY—WAR OF 1812.

What the cards can tell you. Each catalog card contains information that can help you decide how useful a book will be. The author, or main entry, card shows the author's name and life dates. When the author lived may be important in judging the value of the book for your particular purposes. Similarly, the publication date can provide a clue as to how useful the book will be. If you're looking for up-to-date information, a book published 20 years ago may not be helpful. The card tells you how many pages of *front matter* (content in front of the main text) the book has. A lengthy preface or introduction might include valuable information. The card also tells how many text pages there are and whether the book is illustrated. The summary gives you an idea of the book's content. Listed near the bottom of the card are other places in the catalog where a card for the book is filed. This information can lead you to subject headings where you will find entries for other books.

Understanding call numbers. Call numbers are used to classify nonfiction books and other materials according to subject area and to arrange them on the shelves in a certain order. Most public and school libraries use the Dewey Decimal Classification System to classify nonfiction books. Some large libraries use the Library of Congress Classification System (LC). A letter and number code based on the author's name appears below the Dewey or LC number. See page 38 for a guide to the Dewey and LC systems.

The call number of a book appears in the upper left-hand corner of the catalog card and on the spine of the book itself. The call number is important because it acts as the book's "address," telling you exactly where to find the book on the shelves.

If a call number has the letters R or REF in front of it, the book

Dewey Decimal Classification

Authors — Karl Gröning, Martin Saller

Title — Elephants: A Cultural and Natural History

Call number — 599.61 G766 1999

This numbering system, devised by Melvil Dewey in 1876, is a method for classifying books by subject so that books on related materials are shelved together. There are 10 main classes, 000 to 900, each of which is divided into 10 subclasses or divisions (*e.g.*, 590). These are further divided into 10 sections (*e.g.*, 599). Continued decimal notation (*e.g.*, 599.6 and 599.61) permits ever-finer subdivisions. In this case, the last subdivision is Proboscidae (Elephants). A number appears on each library book and determines the way books are arranged in the library. By getting the number from an author, title, or subject record in the card catalog, you can quickly locate any book on the shelves.

5 9 9 . 6 1

500	**The sciences**
590	Zoology
599	Mammalia (Mammals)
599.6	Paenungulata
599.61	Proboscidea (Elephants)

WORLD BOOK photo

is located in the library's reference section. In most libraries, biographies are shelved together, separate from other nonfiction books. Biographies are arranged in alphabetical order according to the last name of the person the book is about. If only letters or the letter F appears instead of a call number, the book is a work of fiction. Such books are shelved separately in alphabetical order according to the author's last name.

When you find an entry in the catalog for a book you want to use, copy down the call number, title, and author. Go to the appropriate section of the library, and the call number should guide you to the book you are looking for.

Computer, or electronic, library catalogs have replaced traditional card catalogs in many libraries. Like traditional catalogs, they store information about books and other media.

You can access information in computer catalogs by using the *keyword search technique*. For example, to find information about Siamese cats, you can type the keyword *Siamese*. The computer then searches the database for all "matches" or "hits" of that word. The keyword may appear anywhere in the title, subject, or description of the topic.

Using a specific keyword, such as *Siamese*, helps you find information faster than using a more general word, such as *cat*. If your search turns up nothing, you then can try using a broader keyword. Likewise, starting any search with a general word such as *war*, *history*, *geography*, or *science* will probably yield too much material.

Words such as *or*, *and*, and *not*, called *Boolean operators*, connect keywords. Use *or* if you need to expand a topic or are unsure about how a topic is listed. For example, you can search under "Britain or United Kingdom" if you are uncertain about the proper word. *And* narrows the scope of your search. For information on the history of the United Kingdom, you would search under "United Kingdom and History." Using *not* helps limit your search. For example, if you want information on the Reformation leader Martin Luther but not on the civil rights leader Martin Luther King, your search terms might be "Martin *and* Luther *not* King."

The electronic catalog record contains the same information you would find in a traditional card catalog record. This information includes the title, subject, author, publisher and copyright date, number of pages, illustration information, and call number.

ELEPHANTS: A Cultural and Natural History/Gronig, Karl; Saller, Martin.--English ed--Cologne [Germany] Konemann, 1999.
482 p:ill., maps; 33cm.
1. Elephants

German ed. published 1988. Includes biographical references and index.

599.67 G765 1999
ISBN 3829017529

Computer card catalogs also allow searches by author, by subject, and by title. Many also allow you to limit your search to materials published before or after a certain date or to certain types of materials. Most computer catalogs indicate if material is in the library or checked out. With many computer card catalogs, you can print out information you need.

Some computer catalogs only store information about materials available on site. Other catalogs are *networked*, or connected, to other libraries and collections in your city, region, or state. You can obtain such materials through interlibrary loan.

Other kinds of catalogs. Some libraries have catalogs in book form, with separate volumes for listings by author, subject, and title. Other libraries store catalog information on microfilm or microfiche.

In microfilm and microfiche catalogs, printed material is photographed and greatly reduced in size, so that many lines fit onto a small piece of film. Special equipment enables users to enlarge the film image so it can be read on a screen. Some libraries store their card catalogs on compact discs.

The vertical file consists of file cabinets in which libraries keep pamphlets, brochures, newspaper and magazine clippings, pictures, and other items that would be difficult to shelve. The material is usually kept in file folders arranged alphabetically according to subject headings.

Libraries frequently update and replace items in the vertical file. For this reason, each individual item may not be listed in the library catalog. Familiarize yourself with the system your library uses.

Reference and Source Materials

Kinds of reference materials. You can find many answers to your research questions in reference materials. Some reference works, such as almanacs and encyclopedias, provide information directly. Other works, such as indexes and bibliographies, tell you where to find information. *General* reference works cover a variety of subjects. *World Book* is an example of a general reference work. *Special* or *subject* reference works, such as *The New Grove*

Dictionary of Music and Musicians and *The Encyclopedia of the American Revolution*, provide information on only one subject. Such reference works cover a subject in greater detail than general reference works.

Many reference books and indexes are available in electronic formats, online via the Internet, or on CD-ROM (*C*ompact *D*isc *R*ead-*O*nly *M*emory). Many of these sources are in multimedia format and supply photographs, graphics, sound, and video; information originally published in other sources such as newspapers or magazines; or articles in books. These are discussed more fully on page 31.

Like the rest of the nonfiction collection, the reference section is arranged according to subject. Familiarize yourself with the part of the reference collection that contains materials for your research. Then you will be able to refer to them quickly when you need information. The list of Selected Reference and Source Materials on pages 36-38 includes general and special reference works commonly found in libraries.

Frequently used reference works. Most libraries have hundreds or thousands of reference materials. You won't use all of them. But some will become reliable sources of information that you turn to again and again. The most frequently used reference works include (1) encyclopedias, (2) yearbooks, (3) almanacs, (4) dictionaries, and (5) periodical and newspaper indexes.

Encyclopedias can be a good place to begin research. They contain thousands of articles on a variety of topics, and so the subject you're interested in is likely to be covered in some form. Reading an encyclopedia article can give you a good introduction to your topic and provide you with many of the facts you'll need. The encyclopedia will also list related information, both encyclopedia articles and other sources.

Yearbooks are annual supplements to encyclopedias. Together with yearly almanacs, they provide up-to-date statistics and other facts on many topics, including business, politics, sports, entertainment, foreign countries, and population. These sources can be useful for information about current events. Archives, or collections of yearbook articles, can also be a good source of information on recent history. *World Book Online* includes such articles covering nearly a century in its *Back in Time* feature.

Dictionaries. Most people think of a dictionary as a source to use when they want to know how to spell or pronounce a word or learn what it means. But if you take time to become familiar with a good dictionary, you may be surprised at the other kinds of information you find. For example, it may contain information about grammar, writing style, and how to proofread a manuscript. Many dictionaries list foreign alphabets and words, common signs and symbols, and place names.

Periodical and newspaper indexes. Magazines and newspapers are valuable sources of information, especially for topics of current interest that may not be covered adequately in books. They can also give you present-day views of events, issues, and personalities of the past. Periodical and newspaper indexes are the reference tools that can tell you where to find articles on your topic in such sources. Some online sources provide methods of searching newspapers and magazines, and enable the user to select and read articles of interest. Others, such as *World Book Online*, contain links to relevant magazine articles.

The Readers' Guide to Periodical Literature is the most widely used guide to magazine articles. It indexes articles from over 200 leading nontechnical magazines. The *Readers' Guide* is issued several times a year in paperback. Each year's issues are then reissued in a bound volume. The periodicals included may vary from volume to volume, so be sure to check the list that appears in the volume you're using. You'll also need to find out which periodicals your library has in its collection. The *Readers' Guide* is also issued in CD-ROM and online format.

The entries in the *Readers' Guide* appear in alphabetical order by subject and author and, sometimes, by title. Abbreviations are used for many parts of the entry, including the name of the magazine and the date of the issue. An explanation of the abbreviations appears in the front of each volume of the guide. Be sure to read it so that you can understand the entry. Here's a sample entry for an article on acid rain:

Acid rain
When nitrate reigns [air pollution damage to forests; cover story] J. Raloff. il. *Science News* 147:90-1 F 11, '95.

The entry tells you that an article titled "When nitrate reigns," by J. Raloff, begins on page 90 of the February 11, 1995, issue of *Science News*. It discusses air pollution damage to forests. The article is illustrated.

In addition to the *Readers' Guide*, there are a number of specialized guides to periodicals, such as the *Art Index* and the *Business Periodicals Index*. These works may lead you to articles not indexed in the *Readers' Guide*.

The New York Times Index is

an index to the articles in *The New York Times*. Many libraries subscribe to this newspaper because it provides broad coverage of national and international news. Entries are listed alphabetically, mainly by subject.

Electronic reference materials are carried by many libraries. The two most common electronic formats are online, where information from a remote computer is delivered via the Internet, and CD-ROM. Electronic sources provide information quickly. Many are also updated more frequently than printed materials.

Some electronic sources provide video, sound, and motion in addition to text. A feature called *hypertext* found in some electronic sources allows you to click on a word or phrase of interest, which will cause additional information to be displayed.

Keyword searching is used to find information in most electronic sources. Some sources also have a site map, menu, or table of contents. See page 29 for information about keyword searching.

Electronic encyclopedias store all the information found in a multivolume set of encyclopedias. *World Book Online* is an electronic version of *The World Book Encyclopedia*. It contains all the encyclopedic information, plus additional features covering recent events and history. Such encyclopedias as *The McGraw-Hill Encyclopedia of Science and Technology* are also available in electronic format. Other reference works stored in electronic systems include dictionaries, the Bible, William Shakespeare's plays, ZIP Codes and addresses, and Bartlett's *Familiar Quotations*.

Electronic periodical indexes, such as *InfoTrac*, index hundreds of magazines and journals. In addition to bibliographic information, electronic indexes may include a summary of the article or the article's full text. Most electronic periodical indexes are searched by using keywords.

The Internet is a worldwide network of computers that has become a popular online information service. Government agencies, businesses, nonprofit organizations, and individuals provide free or fee-based access to their Web sites. Each site is a collection of information taken from other publications or produced specifically for online delivery.

Search features such as those in America Online (AOL), Netscape, and Yahoo on the World Wide Web allow keyword searching to find new Web sites or specific information. The Internet is especially useful when you are looking for information that changes often. For example, you might go to the Web site of a newspaper to search the advertising section for used cars or apartments for rent.

Before going "online," think about your information needs and your search strategy. There is a wealth of information on the Internet, but much of it is unreliable or of poor quality. You will find help in evaluating information sources in the section *Judging the value of reference and source materials* on this page and on page 32. Additional electronic information sources are listed on page 38.

Getting what you need. In most school and public libraries, you can go to the shelves directly to find the item you want. But in some large libraries, you'll need to fill out a *call slip* and request the item from someone who works at the library.

Most libraries keep current issues of newspapers and magazines on shelves for easy access. Past issues may be kept as bound volumes or on microfilm. Bound volumes consist of all the issues for a particular period bound together in one volume. On microfilm, pages are photographed and greatly reduced in size. The images appear on a reel or on a sheet called *microfiche*. A viewing machine enlarges the images and projects them on a screen so you can read the pages. Microfilm of newspapers and magazines is generally stored in file cabinets. As with books, you may be able to get bound volumes and microfilm yourself, or you may need to fill out a call slip.

Judging the value of reference and source materials. After you have the references and sources you want, how can you judge if they are really useful? There are several factors to consider:

1. *Scope of coverage*. Turn to a book's index to see how much coverage your topic receives. If your topic appears on several pages, the work is worth checking carefully. A Web site may have an index or a search feature. You can use either one to see how much coverage there is on your topic. More information about using an index appears in the following section, titled "Getting the most out of a reference work."

2. *Publication date*. If you're doing research in a rapidly developing field, such as computers, you'll want the latest material available. But if you're dealing with a historical topic, such as the Korean War, the publication date may not be as important. In a book, the publication date usually appears on the back of the title page.

On a Web site, if the publication date is not available, spot check the Web site by searching on it

for a recent event that you know of, such as the death of a famous person. If the site contains the current information, it is more likely that the rest of the site is kept up to date.

3. *Authoritativeness.* Is the author well known in the field? Has the author written other works on this subject? The book jacket or introduction can help you find out.

Are there footnotes, appendixes, or other indications of careful scholarship? If you're consulting periodicals, it may be wise to avoid articles in popular magazines not recognized as authoritative. If you have any doubts about the suitability of a magazine article, check with your teacher to see if it would be acceptable.

If you use a newspaper article as a source, keep in mind that the information presented is perishable. Ongoing events are covered in newspapers on a day-to-day basis as more information comes to light. As a result, comprehensive coverage on a topic is seldom available in one newspaper article.

If you are using the Internet to find sources, one way to ensure authoritativeness is to use Web sites with a ".org," ".gov," or ".edu" extension in the address of the site. These extensions are used for the official Web sites of organizations, government agencies, and educational institutions.

Web sites with ".com" extensions are generally owned by companies or individuals, and are often less authoritative. For example, if you wanted to find reliable information about Glacier National Park, it would be best to go to the U.S. National Park Service government Web site, rather than a personal Web page entitled, "My trip to Glacier National Park." Although the latter Web site may have some interesting information, it is likely to be narrower in focus, be opinion-based, or omit important information.

4. *Bias.* Does the author have an apparent bias that could hamper the objectivity of the book or article? For example, if you are doing research on the 1967 Arab-Israeli war, a book, article, or Web site on the subject by either an Arab or an Israeli author might be biased. Although it could be an interesting source to include among others, it would be unwise to use it as your main source.

5. *Edition.* Check the title page or copyright page to see if the book is a first edition or a revised edition. If there have been several editions, it could mean that the book has been well received and is considered a reliable source. Try to use the latest edition available.

6. *Reading level.* Skimming a few pages should tell you if a book, article, or Web site will be easy to understand or if it is chiefly for scholars in the field. Does the author use a lot of technical language? Are unfamiliar words defined?

7. *Special features.* Check to see if the book, article, or Web site has illustrations, maps, charts, a glossary, a bibliography, or other helpful features. Some Web sites provide animations, simulations, and video and audio files. Such features may suggest that the source is a useful one.

8. *Overall quality.* Judging the quality of a book is relatively easy. If it is in a library, it will have been carefully chosen. However, there are thousands of Web sites, and judging their quality can be more difficult.

The presentation of information on a Web site does not necessarily determine the reliability of that information. However, to minimize the time spent researching your topic, you should avoid sites that are poorly organized or slow to use because of advertising or irrelevant graphics.

There are certain things to look for in a Web site. Some questions to ask are: Is the layout of the Web site logical and easy to understand? Is it easy to find your way around the site? Is biographical information provided about authors who publish articles on the Web site? Is background and contact information available about the organization that controls the Web site?

Getting the most out of a reference work. To make full use of a reference work, take time to familiarize yourself with its organization before you plunge in to search for information. See if the book or Web site has an introductory section on how to use the work, a key to abbreviations, or similar helpful information.

Consult the table of contents to get an idea of what the reference work covers and how the material is organized. The table of contents lists chapter titles and such features as illustrations and maps. Don't neglect to check any material that appears in the front and back of the book. An introduction and author's foreword can have valuable information. Appendixes may include charts, tables, the text of documents, and author's notes. Bibliographies can provide you with titles of additional sources to check.

When you're ready to find specific information, turn to the index. The index offers a far more complete guide to the book or Web site than the table of contents. Most reference books have one general index, which lists proper names, titles, and topics together. Some works have sever-

al indexes—for example, an author index, a title index, and a subject index. Always check the index to find out where the information you want is located.

To use an index, think of the word that most clearly identifies your topic. For information on the Nile River, for example, look under "Nile," not "River." For information on the presidency of Nelson Mandela, look under "Mandela," not "presidency."

After you've located the proper pages, skim the text quickly to see if it has the information you need. Look at any headings; the first, or *topic*, sentence of each paragraph; and concluding summaries. This method should help you spot main ideas. If the source has useful information, fill out a source card, read the text carefully, and take notes. For more information on taking notes and preparing source cards, see the following sections.

Preparing Source Cards

You should prepare a source card for every source you consult—books, magazine and newspaper articles, pamphlets, filmstrips, records, and so on. Source cards are simply file cards that contain all the information you'll need later when you prepare a list of sources for your report.

To prepare source cards, use standard-sized cards, ruled or unruled, and write in ink on one side only. Use one card for each source you consult. That way, it will be easy to arrange the cards in alphabetical order later. Use the same format for your source cards that you'll use for the final list of sources. (See page 18 for samples of the list of sources format.) If you number each source card in the upper right-hand corner, you can use this number on your note cards to identify the source of the note, instead of writing the author and title. It's also a good idea to include on the source card the call number of the book and the library where you found it. Then if you need to check the source again, you'll know exactly where to find it.

5 — Number each source card.

Gronig, Karl, and Saller, Martin. Elephants: A Cultural and Natural History. Konemann, 1999. — When citing a book, include the authors' last names, first names, the title and publisher of the book, and the year the book was published.

QL737.P98 Carnegie Library of Pittsburgh

This is the Library of Congress call number for the book. Libraries using the Dewey Decimal system would list the item as 599.67 G765.

Note the name of the library where you found the book.

Taking Notes

Good research depends on good notes. The information you find in reference works must be clearly and accurately recorded in your notes before it can become part of a well-organized and well-written report. There are various ways to go about taking notes. It's important to find a system that works well for you.

One of the best systems uses note cards. Take notes in ink, on one side of the card only. Put only one item—fact, quotation, or idea—on each card. This method will make it easier to arrange and combine your notes in any order you want. Write the source number (taken from your source card) in the upper right-hand corner of the note card. Include the page number of the source in case you need that information for a footnote later. Write a short heading—called a *slug*—at the top of the card to identify the topic or subtopic the note refers to. If you've prepared an outline, the slug should correspond to a heading in your outline.

Elephant anatomy — The slug goes here. If you already made an outline, use the main topics as slugs.

5 — This number should correspond to the related source card.

African elephants flap their large ears to cool themselves off. Heat is released through the skin from a system of blood vessels in the elephant's earlobes. — Limit each card to one idea and use your own words.

Note: Follow this with info about cooling methods using the trunk. — Write notes to yourself in a different color or circle them.

Gronig, Karl, and Saller, Martin p.63

Authors' names

Page number

Before you write a note, evaluate the material you've read to make sure the information is worth recording. If it is, don't just copy it word for word. Paraphrase or summarize the information. You may also wish to add personal reactions or other comments on your notes. If so, circle them, write them in a different color, or use some other method to distinguish them.

Generally, make notes in your own words because they reflect *your* thinking, not somebody else's. You should use direct quotes only when the author's words are particularly striking, when you want to refer to an expert's knowledge or opinion, or when you want to hold an author accountable for a particular idea or statement.

Using Other Sources

The library and the Internet are by no means the only sources for research material. People and places near and far can provide you with information that will make your research more complete and more interesting.

Writing or e-mailing for information. Government agencies and business and professional associations can be important sources of information. By contacting such organizations, you may be able to get reliable statistics and other facts that would be difficult to track down elsewhere. For example, if you were writing a report about literacy in Canada, it might be helpful to e-mail or write to Canada's provincial departments of education for the most recent statistics on literacy. Furthermore, these sources publish a variety of pamphlets and other materials that you can use for research. Many of these materials are free or very inexpensive.

Your library will have directories with addresses of government, business, and other organizations. Searching the Internet is another source of addresses.

When you write for information, keep in mind that some groups are better equipped than others to handle requests. Make your request specific and reasonable. Include a self-addressed, stamped envelope for the reply. Most important, don't assume that the reply will arrive by the time you need it. It might not. Be prepared to use information from other sources if necessary.

Conducting an interview can be an effective way to get facts and personal viewpoints that add special interest to your report. Begin with a courteous phone call or letter identifying yourself and requesting an interview. Specify the sort of information you need. Make yourself available at a time that is convenient for the person you are contacting.

Before the interview, read background material about the topic. That way, you'll be better able to ask intelligent questions and follow-ups. Prepare a list of questions ahead of time.

Listen carefully during the interview. Take notes on important points and be careful to write direct quotations exactly as they are said. Be sure to ask permission to use a direct quote. Ask for clarification of points you don't understand and the spelling of unfamiliar terms or names. A tape recorder can eliminate the need for taking lengthy notes by hand. But again ask permission beforehand. Some people object to being taped or "freeze" when the tape begins. If you use a tape recorder, make sure that it's working properly and that you have enough tape for the length of the interview, as well as fresh batteries or an extension cord.

Before you leave the interview, be sure to write down accurately the subject's name, position or title, and place of business. You'll need this information for your list of sources and footnotes. Don't forget to thank your subject at the end of the interview. Also follow up with a thank-you note.

Conducting a survey is another way to get unique material. You can ask people questions in person or draw up a written questionnaire. In either case, phrase your questions carefully so that people can respond easily and clearly. Surveys that use a "yes or no" or "for or against" format are the easiest to evaluate. You may want to include a "no opinion" category. Or you may prefer a format that allows for a range of opinion. Whatever method you choose, take care to record the results accurately.

Using television as a source. Television documentaries, news programs, and interview shows can give you access to expert opinions and valuable information. If you watch a program as part of your research, be prepared to take careful notes. Be sure to note the name of the program, the network, and the date of broadcast for your list of sources and footnotes.

Museums, art galleries, and historical societies may enable you to explore your subject firsthand. For example, a report on the painter Vincent van Gogh could be enhanced by a visit to an art museum that exhibits some of his works. Many museums and other cultural centers have libraries or other research facilities open to the public. Check to see what your community has to offer that can help you understand your topic better.

Glossary

A selected list of terms and abbreviations commonly encountered in research.

Abr. Abridged; abridgment
added entry The heading above the author line on a catalog card. The card is filed by this entry.
annotation A brief description of the content of a book.
anon. Anonymous (author unknown)
appendix A section that follows the text, containing material relative to but not essential to the subject.
bibliography A list of books or other sources. May be general, selective, on a particular subject, or have a common theme, often annotated.
bk., bks. Book(s)
c. or ***ca.*** *circa*, about. Refers to an approximate date (*e.g.*, *c.* 1340).
call number The classification number used to request a book.
CD-ROM *C*ompact *D*isc *R*ead-*O*nly *M*emory. A small disc used to hold text, graphics, video, and sound for catalogs and reference works.
cf. *Confer*; compare one source with another.
ch., chap., chaps. Chapter(s)
class number The number by which a book is identified in a classification system (*e.g.*, the Dewey Decimal Classification System or the Library of Congress Classification System). It indicates the subject matter of the book.
col., cols. Column(s)
continuation A work (*e.g., The World Almanac)* issued at regular intervals.
copr.; © Copyright The copyright notice usually consists of the symbol © (with or without the word copyright) and the year in which the book was copyrighted. May apply to the entire work or only a part. It generally appears on the *verso* (back side) of the title page.
cross-reference A reference to another entry. A *see* reference is to the preferred entry, the one under which the material appears; a *see also* reference is to related material.
cumulate The contents of several volumes arranged into one volume.
database Information stored in a computer.
DVD-ROM *D*igital *V*ideo (or *V*ersatile) *D*isc *R*ead-*O*nly *M*emory. A compact disc that can hold between 8 and 20 times as much information as a CD-ROM.
documentation Support for a statement, as in a footnote or bibliography.
e.g. *exempli gratia*, for example
ed., eds. Editor(s); edition(s)
ellipsis Three spaced periods used to indicate an omission. At the beginning of a sentence, may or may not be followed by a capital letter; at the end of a sentence, is preceded by a period.
et al. *et alii*, and others
et seq. *et sequens*, and following
etc. *et cetera*, and so forth
f., ff. And the following (*e.g.*, pp. 65 f.: pp. 64 ff.)
fig., figs. Figure(s)
front. *Frontispiece* (picture facing the title page of a book or of a section of a book)
hot link In an electronic document, a text or illustrative link that, when activated, leads to another document.
hypertext In an electronic document, highlighted text that, when activated, leads to another document.
i.e. *id est*, that is
ibid. *ibidem*, the same. In a footnote, refers to the book cited in immediately preceding reference. Ibid. takes the place of the author's name, the title, and any identical material in the preceding footnote. The page number may differ.
id. *idem*, the same. Used in place of the author's name in additional references within a single footnote.
il., illus. Illustrations, illustrator, illustrated
infra See below; to be mentioned later.
Internet A global computer network that links smaller networks, including government facilities, universities, corporations, and individuals.
l., ll Line(s)
LC Library of Congress
loc. cit. *loco citato*, in the place cited. In a footnote, refers to a passage already identified when there are intervening references to other sources.
main entry The catalog card that has full information about a book (the author card).
modem *Mo*dulator-*Dem*odulator. A device that adapts a terminal or computer to a telephone line, allowing users to communicate with one another.
MS., MSS. Manuscript(s)
n., nn. Note(s)
N.B. *Nota bene*, note well; take notice
n.d. No date of publication or copyright given.
network An information system that links several pieces of computer equipment and computer databases together for sharing information among many users and stations.
no., nos. Number(s)
op. cit. *opere citato*, in the work cited. In a footnote, refers to a previously identified work when a different part is cited and there are intervening references. Pages are included in the citation.
p., pp. Page(s)
paraphrase A restatement conveying the general meaning of the original.
pass. *passim*, here and there; throughout the work (*e.g.*, pp. 60, 81, *et pass.)*
periodical Primarily a magazine, published at regular or irregular intervals.
printing date The year the book is printed (usually appears on the title page). Not always the same as the copyright date.
pseud. Pseudonym, a name other than an author's real name; a pen name.
pub. Published, publication
q.v. *quod vide*, which see
recto Right-hand page of a book; the back of a verso page
rev. Revised, revision
scope Extent of treatment, coverage
series title The collective title for a group of books.
sic So, thus, in this way. Used within brackets in a quotation to show that an error is in the original: "It was to [sic] late."
sup., supp., suppl. Supplement
supra See above; previously mentioned
thesis The statement of purpose, the proposition to be explained or proved.
tr., trans. Translator, translation
v., vol., vols. Volume(s)
v. *vide*, see
verso Left-hand page of a book; the back of a recto page
viz. *videlicet*, namely. Introduces examples or lists.
vs. *Versus*, against
Web site A site location on the World Wide Web. Each Web site contains a home page, and may also contain additional documents and files. Each site is owned and managed by an individual, company, or organization.
World Wide Web A system of Internet servers that support specially formatted documents, which can be easily accessed using a Web browser. Not all Internet servers are part of the World Wide Web.

Selected Reference and Source Materials

The following list of reference materials will give you some idea of the variety of sources available for research. In order to list as many items as possible, information is limited to titles and individual authors. Within each group, the books are listed alphabetically by title. The section on electronic information sources represents those materials most frequently found in school and public libraries.

In the section on special reference works, the number in parentheses after a heading—Theater (792)—is the Dewey Decimal Classification for that group. Although some libraries may give different classifications to certain titles, this device will assist you in locating books on these subjects.

The books listed below were selected from the many that exist under each subject heading. They represent some of the most inclusive sources of information on various subjects of interest to students from the junior high school through the college level. Students should find these books most useful in helping them accumulate the kind of information they need in order to write essays, research papers, reports, theses, and dissertations. The books listed below are available in many school and public libraries.

General reference books

Almanacs and yearbooks

Britannica Book of the Year, 1938-
Collier's Year Book, 1939-
The Americana Annual, 1923-
The Time Almanac, 1947-
Whitaker's Almanac
The World Almanac and Book of Facts, 1868-
The World Book Year Book, 1922-
(also published as *World Book's Year in Review*)

Bibliographies

American Book Publishing Record, 1960-
Books in Print, 1948-
Canadian Books in Print, 1967-
Paperbound Books in Print, 1955-1996
Subject Guide to Books in Print, 1957-

Biography

Indexes
Biography Index, 1946-
International
Current Biography, 1940-
The International Who's Who, 1935-
McGraw-Hill Encyclopedia of World Biography
Webster's New Biographical Dictionary
Who's Who
United States
American National Biography
The Biographic Dictionary of Hispanic Americans, Nicholas E. Meyer
The Encyclopedia of Native American Biography, Donald A. Grinde and Bruce E. Johansen
Notable Asian Americans, Susan B. Gall and Helen Zia, eds.
Who's Who Among African Americans, 1996-
Who's Who in America, 1899-
Who's Who of American Women, 1958-
Who Was Who in America, 1897-1981
Who Was Who in America: Historical Volume, 1607-1996
Canada
Canadian Who's Who, 1910-
Dictionary of Canadian Biography
United Kingdom
Dictionary of National Biography
Who's Who, 1849-
Who Was Who

"Curious fact" books

Famous First Facts, Joseph N. Kane
Guinness Book of Records

Encyclopedias, general

The Encyclopedia Americana
The New Book of Knowledge
The New Encyclopaedia Britannica
The World Book Encyclopedia

English-language dictionaries

General dictionaries
Funk & Wagnalls New International Dictionary of the English Language
The Oxford English Dictionary
The Random House Unabridged Dictionary
Merriam Webster's Collegiate Dictionary
Webster's Third New International Dictionary of the English Language, Unabridged
The World Book Dictionary
Abbreviations
Abbreviations Dictionary, Ralph DeSola
Rhymes
Whitfield's University Rhyming Dictionary, Frances Stillman and Jane S. Whitfield
Slang
A Dictionary of Slang and Unconventional English, Eric Partridge
Random House Historical Dictionary of American Slang
Synonyms and antonyms
Roget's International Thesaurus
Webster's Dictionary of Synonyms

Periodicals and newspapers

Bibliographies
Gale Directory of Publications and Broadcast Media, 1869-
Ulrich's International Periodicals Directory
Indexes
The New York Times Index, 1913-
Nineteenth Century Readers' Guide to Periodical Literature, 1890-1899
Readers' Guide to Periodical Literature, 1900-

Research, library use, and writing

The Elements of Style, William Strunk, Jr., and E. B. White
Guide to Reference Books, Robert Balay
Index to English, Wilma R. and David R. Ebbitt
A Manual for Writers of Term Papers, Theses, and Dissertations, Kate L. Turabian
MLA Handbook for Writers of Research Papers, Joseph Gibaldi
Oxford Guide to Library Research, Thomas Mann
The Research Paper and the World Wide Web, Dawn Rodrigues

Special reference books

The humanities: The meaning of life.

Architecture (720)
The Penguin Dictionary of Architecture, John Fleming, et al.
Sir Banister Fletcher's A History of Architecture, Banister Fletcher

Art, general (700)
Art Index, 1929-
Gardner's Art Through the Ages

Literature (800)
American Authors and Books, 1640 to the Present Day, William Burke and Will Howe
Brewer's Dictionary of Phrase and Fable, E. C. Brewer
Encyclopedia of World Literature in the 20th Century
Oxford Illustrated History of English Literature
Contemporary Authors, 1962-
Cyclopedia of World Authors, Frank N. Magill, ed.
Familiar Quotations, John Bartlett
Granger's Index to Poetry
Play Index, 1949-1997

Music (780)
The New Grove Dictionary of Music and Musicians
The New Oxford History of Music

Mythology (290)
Bulfinch's Mythology
A Dictionary of World Mythology, Arthur Cotterell
Meridia Handbook of Classical Mythology, Edward Tripp

Philosophy (100)
The Concise Encyclopedia of Western Philosophy and Philosophers, James O. Urmson and Jonathan Ree, eds.
Concise Routledge Encyclopedia of Philosophy

Theater (792)
The Oxford Companion to the Theatre, Phyllis Hartnoll, ed.
Shakespeare's Theatre, C. Walter Hodges
Theatre World, 1945-

The sciences: Nature and the physical world.

General (500; 600)
American Men and Women of Science
The Hutchinson Dictionary of Scientific Biography
The New Book of Popular Science, Grolier
McGraw-Hill Encyclopedia of Science and Technology
Van Nostrand's Scientific Encyclopedia
Words of Science and the History Behind Them, Isaac Asimov

Biology (574)
The Peterson Field Guides [series]

Engineering (620)
The Dictionary of Space Technology, Joseph A. Angelo
Energy: A Guidebook, Janet Ramage
Random House Webster's Computer and Internet Dictionary
Webster's New World Computer Dictionary

Medicine (610)
Doctors: The Biography of Medicine, Sherwin Nuland
Dorland's Illustrated Medical Dictionary

Oceanography (551.4)
Essentials of Oceanography, Harold Thurman

Zoology (590)
Walker's Mammals of the World, Ronald M. Nowak, ed.

The social sciences: People and society.

General (300)
International Encyclopedia of the Social Sciences
Oxford Dictionary of Sociology, Gordon Marshall

Anthropology (301)
Encyclopedia of Social and Cultural Anthropology, Alan Barnard and Jonathan Spencer
Encyclopedia of Human Evolution and Prehistory, Alison Brooks, Eric Delson, Ian Tattersall, and John Vancouvering, eds.

Customs and folklore (390)
Anniversaries and Holidays, Bernard Trawicky
Funk and Wagnalls Standard Dictionary of Folklore, Mythology and Legend

Economics (330)
Penguin Dictionary of Economics

Geography and travel (900-919)
The Columbia Gazetteer of the World
Fodor's [Travel publications]
National Geographic Atlas of the World
Rand McNally The New International Atlas
Webster's New Geographical Dictionary
The World Book Encyclopedia of People and Places

History (900-909; 930-999)
Basic Documents in American History, Richard B. Morris, comp.
Dictionary of American History
Encyclopedia of American History
An Encyclopedia of World History, Peter N. Stearns, ed.
The New Cambridge Modern History
The Times Atlas of World History

Law (340)
Black's Law Dictionary, Henry Campbell Black, et al.
Charter of the United Nations: Commentary and Documents, Leland M. Goodrich, et al.

Statistics (310)
Historical Statistics of the United States, 1789 to Present
The Statesman's Yearbook
Statistical Abstract of the United States
Statistical Yearbook [United Nations]

U.S. federal and state governments (353)
The Book of the States [yearbook]
Monthly Catalog of United States Government Publications, 1895-
United States Government Manual
Using Government Information Sources: Electronic and Print
Government Information on the Internet

Electronic information sources

CD-ROM magazine indexes
Info Trac/TOM, Gale Group
Magazine Article Summaries, EBSCO
Wilson Disc, H. W. Wilson Co.

CD-ROM materials
Columbia Granger's World of Poetry
Complete National Geographic
Facts on File News Digest, CD-ROM
The Grolier Multimedia Encyclopedia
History of the World
McGraw-Hill Multimedia Encyclopedia of Science and Technology
Microsoft Encarta
Newsbank
U.S. History on CD-ROM
World Book Encyclopedia CD-ROM

Online news/information services
America Online
Britannica.com
Burrelle's Broadcast Database
Concise Columbia Electronic Encyclopedia
DataTimes
DataStar
Dialog
Dow Jones Interactive
EBSCOhost
eLibrary
Encarta Online
Funk and Wagnalls Multimedia Encyclopedia
GaleNet
Grolier Online
Grove's Dictionary of Art
Grove's Dictionary of Music
Information Please
LEXIS/NEXIS Services
NewsBank
OCLC
Ovid
Prodigy
ProQuest
SIRS
WebSPIRS
WilsonWeb
World Book Online

Dewey Decimal Classification

000 Generalities
010 Bibliography
020 Library & information sciences
030 General encyclopedia works
040
050 General serial publications
060 General organizations & museology
070 News media, journalism, publishing
080 General collections
090 Manuscripts & rare books

100 Philosophy & psychology
110 Metaphysics
120 Epistemology, causation, humankind
130 Paranormal phenomena
140 Specific philosophical schools
150 Psychology
160 Logic
170 Ethics (Moral philosophy)
180 Ancient, medieval, Oriental philosophy
190 Modern Western philosophy

200 Religion
210 Philosophy & theory of religion
220 Bible
230 Christianity Christian theology
240 Christian moral & devotional theology
250 Christian orders & local church
260 Social & ecclesiastical theology
270 History of Christianity & Christian church
280 Christian denominations & sects
290 Comparative religion & other religions

300 Social sciences
310 Collections of general statistics
320 Political science
330 Economics
340 Law
350 Public administration & military science
360 Social problems & services; association
370 Education
380 Commerce, communications, transportation
390 Customs, etiquette, folklore

400 Language
410 Linguistics
420 English & Old English
430 Germanic languages German
440 Romance languages French
450 Italian, Romanian, Rhaeto-Romanic
460 Spanish & Portuguese languages
470 Italic languages Latin
480 Hellenic languages Classical Greek
490 Other languages

500 Natural sciences & mathematics
510 Mathematics
520 Astronomy & allied sciences
530 Physics
540 Chemistry & allied sciences
550 Earth sciences
560 Paleontology Paleozoology
570 Life sciences Biology
580 Plants
590 Animals

600 Technology (Applied sciences)
610 Medical science Medicine
620 Engineering & allied operations
630 Agriculture & related technologies
640 Home economics & family living
650 Management & auxiliary services
660 Chemical engineering
670 Manufacturing
680 Manufacture for specific uses
690 Buildings

700 The arts Fine and decorative arts
710 Civic & landscape art
720 Architecture
730 Plastic arts Sculpture
740 Drawing & decorative arts
750 Painting & paintings
760 Graphic arts Printmaking & prints
770 Photography & photographs
780 Music
790 Recreational & performing arts

800 Literature & rhetoric
810 American literature in English
820 English & Old English literatures
830 Literatures of Germanic languages
840 Literatures of Romance languages
850 Italian, Romanian, Rhaeto-Romanic
860 Spanish & Portuguese literatures
870 Italic literatures Latin
880 Hellenic literatures Classical Greek
890 Literatures of other languages

900 Geography & history
910 Geography & travel
920 Biography, genealogy, insignia
930 History of ancient world to ca. 499
940 General history of Europe
950 General history of Asia Far East
960 General history of Africa
970 General history of North America
980 General history of South America
990 General history of other areas

Library of Congress Classification

The system of classification devised by the Library of Congress uses 21 letters of the alphabet to represent the principal branches of knowledge. Subdivision is achieved by adding second letters and Arabic numerals through 9999.

A General works
B Philosophy, psychology, religion
C Auxiliary sciences of history
D History: General and Old World
E-F History: America
G Geography, anthropology, recreation
H Social sciences
J Political science
K Law
L Education
M Music and books on music
N Fine arts
P Language and literature
Q Science
R Medicine
S Agriculture
T Technology
U Military science
V Naval science
Z Bibliography, library science, information resources

The Index to World Book

A

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